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For January, 1938

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CAREFUL readers will note in this issue the adoption of a new type face, judged by typographic experts to possess superior readability. The new face, being slightly more condensed than the old, accommodates a greater number of words to the page. Thus, without increasing the number of pages, it is possible to present a larger amount of editorial material.

YOU will be permitted the semblance of a smile when you learn that Mr. Shout is to write on "Linking the School by Loud-Speaker," for the February issue. The fact that the school has found in radio a new voice is something worth shouting about, and who should do this better, we ask you, than Howard F. Shout, chairman of the radio committee of Jefferson Intermediate School, Detroit?

MECHANICAL difficulties have impeded too long the presentation of a manuscript that every administrator has probably been subconsciously craving. We refer to the method of evaluating school board members worked out by Dennis H. Cooke, professor of school administration, George Peabody College for Teachers, and Quill E. Cope of Sparta, Tenn.

This presentation will be a feature of the February issue. The rating scale worked out by these schoolmen lists twenty-one characteristics that county school board members should possess. Each board member is expected to check himself on each item at the place on the scale he thinks is correct. When the twenty-one separate scores are totaled, the board member will find he has rated himself some place between 1 and 1,000.

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ONCE a month we give you M. M. Chambers and his reviews of school law. In February another schoolman, also a lawyer, answers grave questions, such as these: Why are liability actions against teachers increasing? Is it necessary for a teacher to carry liability insurance? Has the board of education the power to insure teachers? Has the legislature the power to pass a statute relieving teachers of all liability while performing the duties of teaching?

In the same issue Mr. Chambers will be writing on workmen's compensation for school employees. The other author, we forgot to say, is Daniel R. Hodgdon, lecturer on school law at New York University and editor of *School Law Review* and *Clearing House Magazine*. He is a Ph.D., a J.D. and an LL.D.

PIONEER in training head and hand through the use of tools is the school system of Chanute, Kan., where twenty-five years ago when the whole concept of manual training was in its infancy women of the community demanded the establishment of trade courses. Recently Chanute has opened a second trade school, the plan and equipment of which will be described next month by L. H. Petit, superintendent of schools.

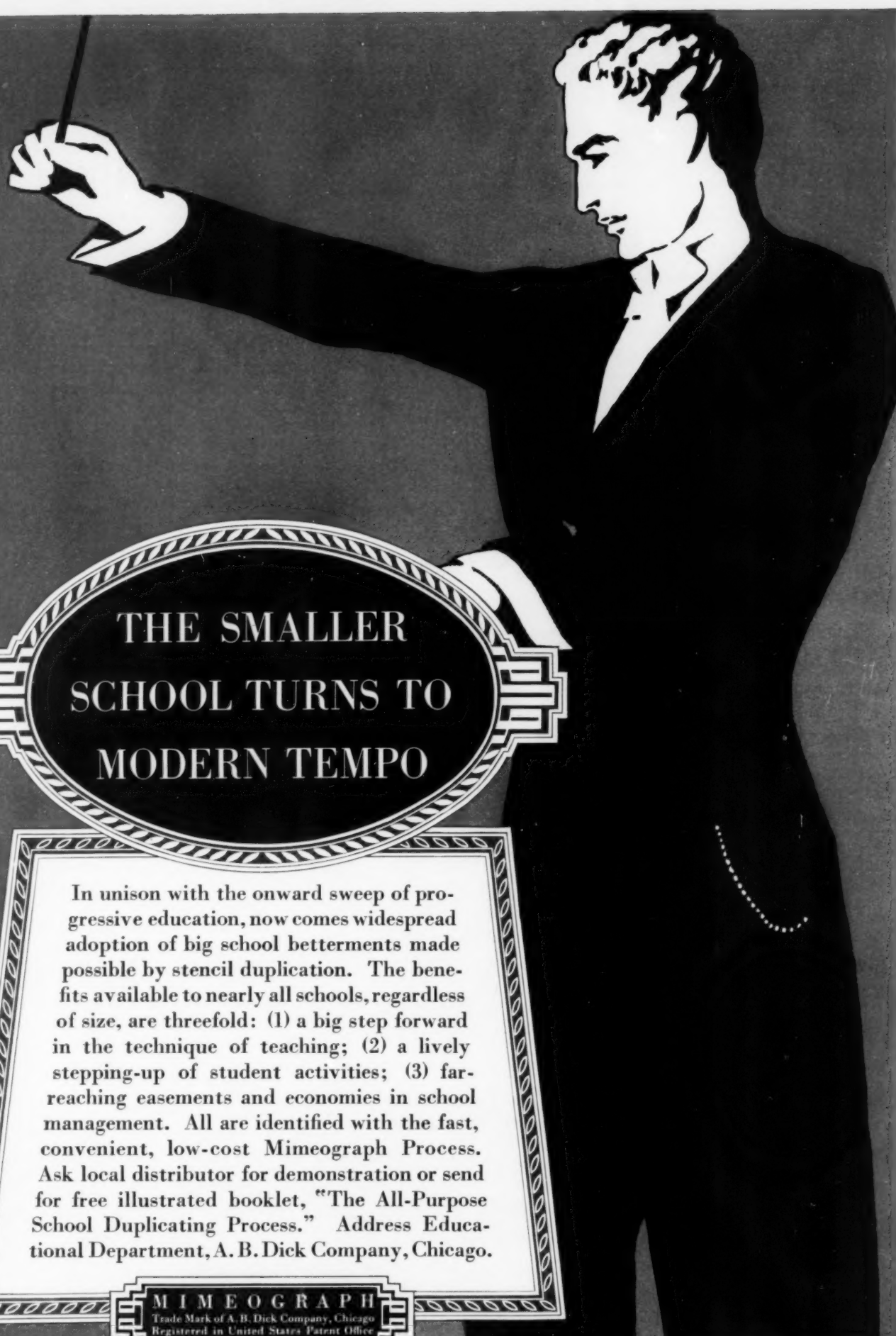
Further mention of the importance of proper equipment will come in February when Harold Paullus lists the complete outlay of laboratory items necessary for getting the high school at Crystal City, Mo., "Set for Science." The science work in this industrial town is thorough and the projects are interesting and varied.

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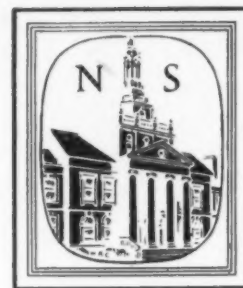
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LOOKING FORWARD

Our Birthday

WITH a full decade of achievement to its permanent credit, *The NATION'S SCHOOLS* celebrates the beginning of the eleventh year of publication with this issue. It required considerable publishing courage in 1928 to discard the conventional formula for professional journals and to blaze a new trail. This infant publication was premised on the assumption that educational objectives, needs and achievement could be translated into intelligible and simple language, that professional editing could have brightness and interest, that format might be attractive and that a real need existed for the translation of the results of technical research into usable form by executives.

Apparently this feeling also was shared by a large segment of the teaching profession and the enthusiastic acceptance of the infant publication was far beyond publishing anticipations. This professional approval that brought *The NATION'S SCHOOLS* from a mere idea to accepted leadership in the field of educational administration also occurred during the depression—one of the darkest periods in educational history.

At the beginning of our second decade we rededicate *The NATION'S SCHOOLS* to the championship of the rational enlargement and improvement of education in all areas. Our pages will continue to serve as a democratic forum in which all shades of opinion and practice from conservative through progressive may find satisfactory expression so long as the democratic rules of impersonality and fair play are observed.

Editorially we shall favor a progressive point of view, continue to point with both pleasure and pride to outstanding achievement, and with equal zeal continue to call attention to outstanding shortcomings and weaknesses in both institutional and professional areas, in the belief that full and complete publicity on all issues is the best safeguard against institutional inertia and dry rot. We believe that education is the concern of all of the people and that the teaching profession has not only a technical and job interest, but also a social responsibility for the improvement of the educational function.

To the members of our editorial and consultant

staffs, for their constant advice and helpful aid, and to the thousands of readers who have made our success possible, we desire at this time to express our sincere appreciation for both support and encouragement and our best wishes for a prosperous New Year both to themselves and to the schools.

Charles Hubbard Judd

THE retirement of Charles Hubbard Judd as head of the department of education at the University of Chicago this year (June 30, 1938) marks the withdrawal of another outstanding leader from the active professional stage. In robust health and at the height of his intellectual powers, termination of active institutional relations in this case merely means that he will direct his interests and energies into educational channels that have intrigued his imagination, other than those of active teaching and administration.

Born in British India of missionary parents, he received his university training in American and German educational institutions, completing his doctorate at the University of Leipzig in 1896. After a teaching career that included Wesleyan University, New York University, the University of Cincinnati and Yale University, Doctor Judd went to the University of Chicago in 1909 as professor and head of the education department, remaining in that position for twenty-nine years. He also served as chairman of the psychology department from 1920 to 1925.

The generation spent by Doctor Judd at the University of Chicago encompassed the most revolutionary period of change in the history of education in the United States, and on this stage he was no idle spectator. In classroom, in regional and national educational committees and on platforms the length and breadth of this land, he preached his belief in democratic secondary education and also stimulated the rapidly growing scientific movement in education. Although strongly in the van for the last twenty years, some of his progressive colleagues sensed a trend toward conservatism during the third decade. This charge Doctor Judd has never admitted, and seems somewhat grieved by the accusation. Our own belief

is simply that Doctor Judd was far in advance of the group during the first twenty years of service.

Doctor Judd possesses one of the keenest minds in education, and with it a thoroughgoing impatience with dullness, slowness and institutional procrastination. This impatience at times has translated itself into a brusqueness in personal relations that sometimes bruised more sensitive individuals and produced strong emotional reactions. Some of the complete evangelical certainty of his missionary forbears apparently carried over into his professional relations and may be typified by a remark we heard a serious-minded educator make after engaging in somewhat strong professional argument. Delivered between emotional sputterings, its gist was: "If Judd and Jehovah staged a debate, Jehovah would have no chance because he couldn't furnish enough objective evidence to convince Judd."

His forthrightness and real courage in meeting issues as they arose both in university and community, his ability to call a spade by even simpler and more descriptive terms, and his cutting invective when thoroughly aroused did much to create some of these emotional reactions. However, this much is to be said in defense of a hard hitting, forceful method of delivery: it does present an issue in sharp outlines, and the teaching profession is much too sensitive. It is the age-long conflict between the dynamic and the academic.

If venturing his own opinion, Doctor Judd probably would feel that his chief contribution had been in the field of psychology and in advancing the scientific movement in education. Our own opinion inclines to his much wider influence as a stimulating teacher and an aggressive, fearless leader. Doctor Judd's ultimate contribution to public education cannot be finally appraised until we have more historic perspective, but it is our firm conviction that his aggressive and dynamic leadership did contribute definitely to the advance of educational thought not only in the Middle West but for the country as a whole.

Although he closed his active institutional teaching in August, he is technically on leave of absence during the current academic year and has been engaged in serving as a member of the President's Advisory Committee on Education and also on the science committee of the National Resources Committee. After completing these tasks he plans to engage intensively in work that has for its purpose the reorganization of the American public school textbook, a project that has been absorbing much of his energy in recent years. However, some of his friends maintain that his really secret ambition and dream is to get a job as a teacher in a one-room rural school where he can experiment with and put into practice some of his advanced ideas on teaching. Children are naturally attracted to him and whatever impatience may characterize his colleague relationships, there are only interest, patience and full sympathy where children are concerned.

A wreath of laurel for past efforts, enthusiastic support for his new program, and many more years of active service is our New Year's wish for Charles Hubbard Judd.

Consider the Child

FREQUENT reports from large as well as small town school systems indicate that certain areas of social conflict exist between the school and the neighborhood stores. These difficulties arise apparently out of attempts by school cafeterias to insist on child patronage when the corner "hot dog" or "barbecue" lunch stand is much more attractive. The children also derive satisfaction from using the corner store as a "hang-out" or social center before, during and after school.

Sometimes these conflicts become bitter and move over into the field of political reprisals. In other instances covert pressure is brought to bear on members of the board of education to have certain administrative personnel inclined to "reason" or be transferred. In practically all of these difficulties the child's interests and sympathies are definitely with the neighborhood merchant.

Study of certain conflict areas indicates that several elements are common in each difficulty and that it may therefore be profitable to generalize in making suggestions for harmonizing these difficulties. The children in each instance wanted freedom of choice in selection of both lunchroom and food. They also felt that freedom from faculty supervision and surveillance was necessary to give them the proper social atmosphere for the greater enjoyment of their lunch. The neighborhood store wanted the child trade.

On the other hand, the school demanded that the child patronize only the official cafeteria under conditions of formal control that were irksome. The institution had determined what was good for the children in the way of food, and these balanced menus were used regardless of whether the combinations appealed to the imagination or taste of the children. Rigid supervision of the lunchroom made informal social relations between children difficult, if not impossible.

These two diverse demands create conflict to the ultimate detriment of good child and community relationships. In our humble opinion the institution may be technically right, but socially unwise. Coercion is a doubtful instrument to use at any time in a democratic setting. The possibility that the institution place itself on a competitive level with noninstitutional neighborhood eating places appears to have much more merit. Mealtime should be a happy time and a wide range of choice in food is desirable. There is no reason why the school cafeteria cannot serve wholesome food in dietary balance and yet make it attractive to the child. Instead of assuming that institutional decision is always correct, it might be a good idea to study

child eating tastes and cater more to them. The cafeteria also can be made a friendly place in which children come of their own free will. There may be more noise and laughter, but this factor can be overcome by better acoustical treatment of ceiling, walls and floors; there may be less regimentation and possibly a lower unit use of eating space at a given time but much more fun in eating.

The craving of the child for a social gathering place in which he is free from institutional supervision may be met by providing such quarters in the school building itself under direct pupil control. So long as the pupils maintain their own order and reasonable cleanliness of quarters, their rooms should be "off limits" to the faculty. Under these conditions it might be surprising how quickly the undesirable competition of the corner drugstore or poolroom would fade without the use of prohibitory mandate.

Institutional flexibility in adjusting itself to child needs and desires for social eating and informal gatherings has the possibility of changing current neighborhood-school conflicts into areas of good natured, friendly competition, permitting the quality and satisfaction of service to determine the winner.

Samuel L. Smith

FOR seventeen years a soft-voiced gentleman named Samuel L. Smith has been going through the South as the representative of the Julius Rosenwald Fund. A Southerner by birth, with an appreciative remembrance of what an early education in a one-room log cabin school meant, he was ideally equipped to carry on the field work of the idealistic Chicagoan. As southern field agent he has supervised the construction of 5,334 Negro rural schools which have furnished accommodations for 600,000 children in fifteen different states. The beginning of this huge philanthropy required great delicacy in administrative approach. The selection of Samuel L. Smith, a native Tennessean instinctively familiar with those areas of delicate emotional nuances, was a happy one. The Rosenwald idea became popular under his direction.

In addition, there was also developed at Peabody College for Teachers an interstate school building service in which specialists were trained in the school plant field and went forth to become directors in their several states. The leadership furnished by these enthusiastic young men has gone a long way to improve school building service in the South. The stimulation and supervision of either activity would have been a worth while career, but Samuel L. Smith combined the two and did them both well.

His attainment of retirement age and decision to devote the balance of his career to personal affairs was marked with appropriate ceremony by the directors of the Rosenwald Fund in early November. President

Franklin D. Roosevelt contributed a strong letter of personal appreciation. Dr. Edwin R. Embree, president of the Foundation, and Lessing J. Rosenwald, eldest son of the founder, all united in tribute "to praise Mr. Smith, not to bury him."

To this expression of gratitude for valuable social services rendered we desire to add our own. We believe that Samuel L. Smith has performed a service for his Southland that few others could have accomplished so ably and in so human a way. We prize him for his leadership and as a man. His delicate appreciation of friendliness in human relations amounts almost to a sense of genius. Where Samuel L. Smith is, conflict and suspicion dissolve into friendliness and harmony. Not the least of his accomplishments is an inexhaustible store of *genre* stories characterized by their pungent humor. He is one of the few men who can tell a story at breakfast and draw a laugh. We wish him full enjoyment of his richly earned leisure.

Teachers and Cooperation

THE committee of the Department of Supervisors and Directors of Instruction in charge of the yearbook on cooperation has prepared a bulletin entitled "Teachers and Cooperation" that may be recommended to the teaching profession without reservation and with considerable enthusiasm. The material, brought together and made available to teachers for the first time, points the way to the development of democracy within the schools. Copies may be secured for 25 cents, and we have never seen so much valuable information offered at a money price so low. This material, plus the contributions made by individual teachers, will be discussed at the Atlantic City meeting in February, and prepared in final yearbook form during the early summer so that it may be available for use by the teaching profession during the ensuing school year.

Requiem

IN PERFECT harmony with the democratic simplicity and consistency that marked his long and colorful career, William McAndrew's last resting place in the beautiful Huron Valley among the rolling hills of Washtenaw, near Ypsilanti, Mich., has been marked by a small and unpretentious stone on which is graven:

William McAndrew
Schoolmaster
1863-1937

His professional achievement and memory will be marked in the future by a greater monument when the City of New York places his name above the doorway of one of its new high schools.

The Editor



Girls test themselves in mechanical skills.

For Those

GLADYS M. LITTLE



Table setting, serving and etiquette intrigue the girls in this Detroit intermediate school. One of their duties, too, is keeping the teachers' room clean and in order.

THE 9B grade of the Cleveland Intermediate School, Detroit, each fall semester averages from 600 to 800 pupils, and of that number, from forty to fifty girls drop out upon reaching the age of sixteen or do not continue into the senior high school. The reasons given by these girls are: (1) economic necessity, (2) no mother in the home, and (3) parental belief that children should help in the support of themselves and the family as soon as they can stop school. The school is in a community of low economic status, and approximately 70 per cent of the pupils have a Polish inheritance.

It was decided to adjust the curriculum to teach these girls some practical things not included in the

regular outline of courses. The first group was formed in September, 1929. Girls were selected on recommendation of the counselor. They were told about the plans and were invited to join if they cared to. The first class started with an enrollment of forty, and groups of approximately that number have been formed in the fall of each year since. The personnel varies throughout the year, girls joining from time to time and some leaving when they become sixteen. The homeroom teacher and class teachers have been selected carefully to ensure a sympathetic understanding of the girls and an interest in developing the class work.

The group is, of course, never homogeneous as to intelligence rat-

ing or scholarship and the median is in the lower range of intelligence.

We have tried to build units of work in each course on the basis of the life the girl will have in the community and on the type of work she will do. The subject matter is constantly developing and changes from year to year.

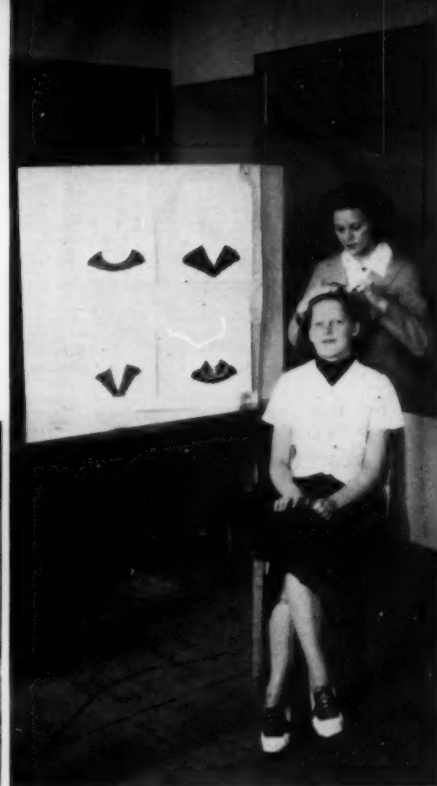
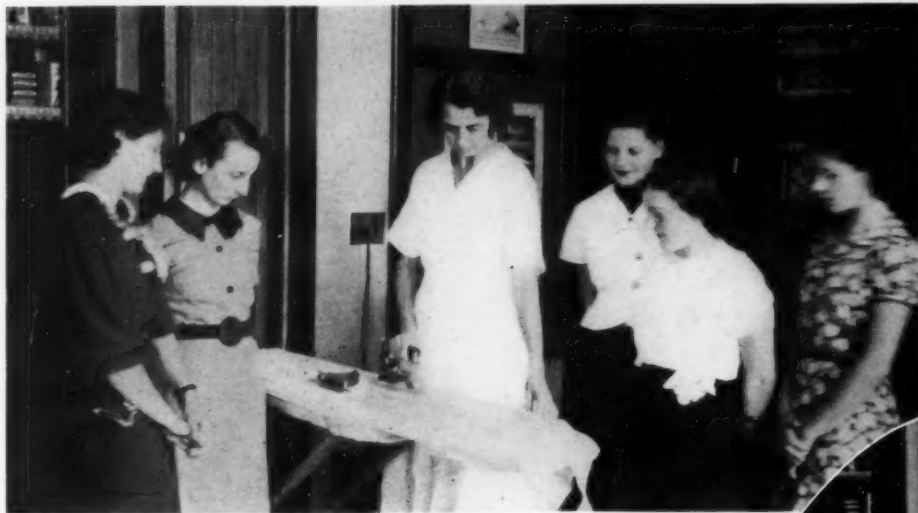
In order to profit from the experiences of the girls who have taken the course and also to keep in touch with them, we write them after they have been gone a year and ask them to answer and return a brief questionnaire. We find that after one year the girls are distributed about as follows from a class of forty.

Fifteen girls are employed as maids and nurse-maids; five remain at home; three are married; three are employed in stores, laundries or restaurants; two are in beauty culture work or are taking courses in that field; five are employed in factories; three are going to high school, and four cannot be located.

At the end of five years another follow-up is made on some of the groups and, although the returns are scattered, there is sufficient evidence to conclude that this distribution remains unchanged except that

Who Drop Out

One unit to which they all respond is the study of what type of hairdress and what sort of neckline are best for the individual.



many of the girls marry within two or three years after leaving us. Our emphasis, therefore, has been on homemaking and personal development.

In social science, under occupational information, the emphasis is placed upon the types of jobs that will be available, employer-employee relationships, working laws for Detroit girls, opportunities in Detroit for continuing education in leisure time, how to find a job and how to hold a job.

Community civics is discussed from the point of view of the girl's responsibility to the community and the various agencies in the community that will be of value to the girl.

The social science teacher is also the homeroom teacher, so that the homeroom program of character education is continued in the social science work on development of right attitudes toward life and work.

In English, emphasis is placed on oral rather than written expression. A drill pad is used to review fundamental grammar. One unit is given to the writing of simple business and friendly letters, but the most of the units are planned to develop the girls' ability to express themselves

Bathing and dressing a baby are skills all must master, because many become nursemaids and more become mothers.



and to read intelligently for information and pleasure. Reading the newspapers, magazines and current books, appreciation and judgment of movies and the radio, the art of conversation and use of the telephone are stressed.

A unit now being developed is story telling for children. A canvass of the group showed that all the girls except two were associated with children. So our librarian took the group into the library for an hour and introduced them to books for different ages of children. The children's librarian from the Schoolcraft Library spent an hour with the girls, discussing and illustrating the art of telling a story. This was followed

by practice in the classroom and individual visits to the public library at the story-telling hour.

In mathematics, the discussions are kept on the level of the income which the families have and which the girls themselves will have when they get a job. The budget that each girl builds is based on the information she has received in social science about the job she is going to try to obtain, on the wages she is likely to get, on whether she will live at home and if she does whether she will contribute to the expenses of the home, and on what kind of clothes she will need. Each girl builds her own individual budget. Since some of the girls go into

stores and offices, they are taught how to make change, how to make out sales slips, wrap bundles and do simple filing. We have set up some simple filing tests, which the girls can do to compare themselves with one another in accuracy and speed; also some simple tests in manual dexterity. When the typing program has permitted, the girls have been given two hours of typing each term.

In general science the regular course of study for the ninth grade, biology and physiology, is used as a basis for the discussions. However, the girls are encouraged to bring in their own problems and questions, and these are used as the nucleus for the information and projects given.

Health instruction is given one day a week throughout the year as a part of the regular health program and

this correlates with the work in general science. The units are a part of the regular course of study, but the more immediate need for the knowledge makes for more practical applications. For example, periodic health examinations take on a new importance when the girls have learned that cafeteria workers must have a health certificate, which must be renewed periodically. General demonstrations are used as often as possible. A girl from one of the previous groups, who is now in a beauty shop, offered her services to the class to demonstrate and lecture on the care of the hair and nails.

Besides the planning, cooking and serving of foods, many other phases of homemaking are taken up under the subject of foods. The success of the majority of the girls will depend

upon this type of information, so we have tried to give them as much practical experience as possible. They serve meals to teachers and school guests, and they serve at teas. A demonstration of ironing is followed by practice. They are taught how to make beds and how to bathe and dress a baby, the latter by a public health nurse. A second-hand vacuum cleaner has been obtained so the girls can learn to operate one.

The group has taken over the care of the teachers' rest room. In art class they plan the placing of the furniture and the kind of curtains for the room; in their clothing class, they make the curtains, and in the foods class they arrange for the care of the rug, dust the floor and care for the plants. They change committees each day so that all the girls may serve.

In clothing, emphasis is placed on mending, alteration, pressing, care of shoes, gloves and hose. The pitfalls as well as the advantages of bargain buying are discussed. A wardrobe planned for two years lists the clothing each has on hand, the kind of clothes each will need for the kind of work she hopes to do, based on the budget for clothes set up in the mathematics class. Since the girls marry soon, and since they have the precedent in the community of elaborate weddings, they also plan a trousseau which will meet the approval of community standards, which will be within the family budget and which will be useful after the wedding. They discuss the proper use of cosmetics and styles of hairdress suited to individual types and occasions. They also are taught good manners for the home, office, on the street and in public places.

The art work is motivated by the work in clothing, foods and home-



Most of the girls come from families of small home-owners. They study interior decoration and gardening projects in their art classes. All have children in the family, so story-telling courses for small children have been developed.

making. The fundamentals of color and design for clothing are studied. Units on home planning and interior decoration are based on good taste in the home on a limited budget. The furnishing of a bungalow of the type that predominates in the community is worked out on a limited budget. Some time is spent in studying good pictures that are obtainable through inexpensive prints. An attractive table is set with ten-cent store dishes.

Individual projects are planned for leisure time, the making of samplers, needle-point, quilts, rugs and table covers for the home. Since the community is one in which great pride is taken in owning a home and having a garden, in the early spring the girls plan the arrangement and planting of a garden for the bungalow for which they previously have planned the furnishings.

Besides all of this regular work in classes, every opportunity is taken to give this group of pupils special projects so as to develop initiative and responsibility. For example, they take care of the collection and redistribution of books for the teachers' book club.

Not a Group Apart

The group is not set apart from other homeroom groups or referred to as a special group. It is known by a homeroom number as all other homerooms are. The girls take part in the various clubs, intramural games and other extracurricular activities. A spirit prevails among the girls that it is a privilege to belong to the group, that it is for their benefit and that they help to determine what they shall learn.

The school tries to effect a transition between it and the job. Some of the girls have part-time jobs during their last term and shortened programs are arranged by the counselor for them. Many times these part-time jobs develop into full-time jobs in June. The counselor, through her contacts with the group and through her work with the homeroom teacher, prepares the girls for the visit of the placement worker from the central office about a month before the close of school. The girls have decided what type of work they want to do before the placement worker visits the school to talk to

them and to take their applications. Many are placed and ready to start work when school is out. Last year all who wanted housework were placed immediately and most of the other girls who wanted jobs were placed within a very few weeks.

The girls in this group who do go on to senior high school take the general course, and when their correlation cards are returned at the end of their first term, they are found to have done as well as pupils who have gone from regular classes.

Neglect in Current Pedagogy

ALEXANDER J. STODDARD

MAN has struggled through the centuries to attain his rights. Sometimes it has been difficult even to define them. Some have been declared to be the natural endowment of man, given by authority or circumstance beyond human control and, therefore, inalienable by any earthly power. Other rights accrue through man-made laws and relationships, resulting as human beings live together in society. The test of civilization is the extent to which all men enjoy the rights that belong to them and the justice with which rights are ensured to the various individuals that make up society. This is all a complicated process and is becoming more so as life itself becomes increasingly complex.

We in education are not unconcerned with this battle for rights. We watch with interest the political fronts as they advance and retreat in the Old World; we view with anxiety the industrial, political and countless other conflicts in our own country; we see seething humanity everywhere engaged in surging struggle for their rights. We know this process will go on and on and that the schools have tremendous responsibilities in connection with it. But there is another side to this struggle for rights that concerns the schools even more.

If there is any one weakness of modern civilization more fundamental than others, it is the failure on the part of so large a proportion of our people to realize that all rights have their complementary or reciprocal obligations or duties. Even the right to life is realized only by the one who will pay the price of developing his own capacities and abilities to the

utmost; liberty comes only to him who has struggled to find the truth, because it alone can make one free, and the pursuit of happiness ends only in helping others to find it. The strange paradox of life is the age-old truth that one finds life only as he gives his own away in helping his fellows.

All over the world men are demanding their rights, often disregarding those of others, and giving too little thought to the consequent responsibilities of these rights. Sometimes it may be justifiable to tear down outworn and outmoded shelters provided others, if needed, are built on their ruins.

We must realize that there is no right to destroy life's values without the obligation to create and replace with new and better ones. Somehow, the schools and other educational agencies of society must make this stern concept of duty a part of every phase of the curriculum. It is the antithesis of the soft pedagogy having its vogue today in so many quarters. It is possible that we have overemphasized our rights, even those of children, without giving full attention to the significance of the responsibilities that go with the rights. In our enthusiasm to guarantee even the rights of childhood we have neglected this other phase in our educational philosophy.

There is urgent need for the formulation of a charter for education. But when and if this charter is made, it should not only clarify the rights of children and parents and teachers and all others concerned in the process of education, but it also should make crystal clear the obligations each assumes in claiming the rights.

Their Grammar Is Better

FRANK T. DOLBEAR

LIKE teachers in most school systems, at Tunkhannock Borough Public Schools, Tunkhannock, Pa., we are constantly faced with the usage of improper forms of English grammar by high school pupils. Try as we may to provide for this improvement through regular curricular means, we find a definite lack of interest on the part of some pupils in improving their use of English. After some discussion and after trying several plans we decided on the following plan to improve spoken and written English.

We felt that some pupils might have difficulty with particular phases of good usage. Therefore, the various quotations and statements used by pupils which contained poor English were summarized. Teachers were asked to submit, at the end of one week, the exact wording of sen-

tences which contained improper forms of the English language. These were summarized and four general divisions made, namely, (1) parts of verbs, (2) double negatives, (3) prepositions and (4) agreement of verbs with subject.

Under each of these headings English teachers were asked to arrange a brief presentation containing the most frequent errors and the proper forms. These were formulated and typed on 5 by 8-inch cards and placed in the library, directly under supervision of the librarian. All teachers were informed of the divisions made and copies were submitted to them for reference.

We started with the senior class. For one week any senior who, either in or out of the classroom, made a grammatical error in the hearing of a teacher was referred to the particu-

lar card in the library which covered his difficulty. Within twenty-four hours the pupil was required to report back to the teacher and give sufficient evidence that he had studied the card and was now familiar with the correct usage or form. In subsequent weeks pupils in other classes were destined to undergo the same scrutiny as the seniors. The results were most gratifying and pupils and teachers alike felt that some of the errors which so easily become habitual had been eliminated.

Below is a copy of what was contained on the four cards we devised.

Parts of Verbs

For ordinary purposes we speak of a verb as having three principal parts as—

go	went	gone
see	saw	seen

though sometimes we include the present participle. For example:

go	going	went	gone
see	seeing	saw	seen

In the rules that follow, we shall consider each verb as having only three principal parts.

If a verb gives you difficulty, first make certain that you know its three principal parts. Then observe the following rules:

Rule I. The second part of the verb must be used alone without an auxiliary (helping) verb.

Rule II. The third part of the verb must always have an auxiliary verb.

Examples for Rule I.

1. John went to the game.
2. I saw you there.

Examples for Rule II.

1. Have you seen this movie?
2. We were gone when you came.

Prepositions

Every preposition requires an object. Naturally, a word cannot be an object unless it is in the objective case.

Examples:

He was standing between you and me.

not

between you and I.

This is for him and her.

not

for he and she.

Double Negatives

By negatives we mean such words as—

no, none, not, never, neither, etc.

It is incorrect to use two such words in any sentence.

Examples:

Incorrect: I haven't no paper.

Correct: I haven't any paper.

Incorrect: I won't never tell.

Correct: I won't ever tell.

Incorrect: I haven't none neither.

Correct: I haven't any either.

Agreement of Verbs With Subject

Verbs must agree with subject in number.

A verb must be singular if the subject is singular, and plural if the subject is plural.

Examples:

Here are (not is) the pins.

The schools were closed.

It was the worst storm we were ever in.

Neither of them is going.

Prepositional phrases modifying the subject do not affect the verb; the verb must always agree with the subject.

Examples:

The pages of this book are torn.

The owner of the dogs was angry.

The box of shears is on the table.

"Has went," double negatives and the many similar expressions that assault the sensitive ear are disappearing in this Pennsylvania high school following a new system of drill in English grammar. Four cards summarize and correct the most frequent errors. On these the English-butchers must concentrate until they appear to know correct usage and right construction.

Teaching Pupils How to Think

CLYDE R. MILLER

PROPAGANDA is used today to sell a lot of things besides commercial products. It is used to sell ideas. High-pressure public relations men draw fees that run into hundreds of thousands of dollars for their ability to "sell" the American people on ideas that will make tens of millions of dollars for the men who pay those fees. They stampede us into war, get us to pass laws that vitally affect our lives, without our knowing why until it's too late. And they do it by precisely the same techniques as those employed to sell us coffee.

That's what makes this whole business of propaganda so important. Drinking a high-pressured brand of coffee won't kill us. Dashing off to war, however, might.

Mass Production of Propaganda

There's nothing really new about propaganda. Demosthenes and Cicero were past masters at it; those speeches by Cicero that high school youngsters tussle with in Latin classes are stuffed with propaganda devices, from name-calling to flag-waving, from stacking the cards to plain falsification. It's only since the World War, however, that propaganda has reached the mass production basis.

The World War really was a school for propagandists, a school in which propagandists learned by doing. Smart young newspapermen, who served in military intelligence and learned how easy it was to make people believe the most fantastic yarns about the "Huns," decided when they left the army to convert this knowledge into cash by making people believe equally fantastic tales about the virtues of vitamin-treated toothpaste. And so, propaganda became a big business.

Today we are subjected to a constant barrage of propaganda. Ex-newspapermen on the C.I.O. payroll

deluge us with propaganda for the C.I.O. Their former colleagues, now employed by Little Steel, deluge us with propaganda for the open shop. Do you favor the Spanish fascists? Then hire a public relations counsel to bombard the man in the street and his wife in the kitchen with pro-fascist propaganda. Oh, so you favor the Spanish loyalists? Then get yourself a public relations counsel. . . .

No sooner did brewers notice a reaction against repeal than a United Brewers' Industrial Foundation with several hundreds of thousands of dollars at its disposal was formed to run a publicity campaign for beer.

The federal government's case against the aluminum trust hasn't yet come up for trial, but already the aluminum people have retained a public relations counsel "to mold public opinion in their favor." The first thing John J. Raskob did in his campaign to rebuild the Democratic party after its crushing defeat in 1928 was to snatch Charles Michelson from the newspaper business and put him to work on the "Smear Hoover" campaign.

All this naturally has a significance for the schools, as what hasn't? The schools are supposed to be training children for "intelligent participation in citizenship." However, the issues that face the citizen today are be-

fogged completely by propaganda. How can the citizen be expected to make intelligent decisions on those issues unless he first dispels the fog? How can he do that unless he knows what propaganda is, and how it operates and why?

This means that our schools must teach children just why people think as they do. We vote for a certain man for office. Do we do so because of his qualifications and his platform? Or have we been lured on to his bandwagon solely by the fact that his folksiness appeals to us? (He's just a regular fellow, you know; loves babies.) Or by the way that he makes us feel important when he speaks at our labor union meetings? ("The workers are the backbone of the nation," he said in his last address.) Or by the fact that some of the best people in town have endorsed him? (Our superintendent of schools is on the educators' committee organized in his behalf.)

Take It With Grain of Salt

Men have been elected for less. Jimmy Walker, you may remember, was New York's darling, New York's bad little boy, who was always late to appointments, but who always had a wisecrack on his lips. "How cute!" said New Yorkers, and they elected him mayor.

If people know that for one reason or another they are "suckers" for even the most obvious kind of flattery, and if they know how propagandists take advantage of this weakness, then chances are they'll know how to guard against it. If people know what their prejudices are, then propagandists won't be able to play upon those prejudices so easily. That goes for all the other ways of thinking and feeling and reacting that characterize the great mass of people, and that propagandists know so well, and know how to use so well for their own advantage.

People cannot guard against propaganda until they know as much

Making the next generation proof against public relations patter is a process of teaching the pupil how to think instead of teaching him mere facts, contends the new Institute for Propaganda Analysis

about themselves as the propagandists do, and until they understand how and why the propagandists can push them around like puppets.

Nor can people guard against propaganda unless they know something about the mediums of propaganda—the press, the radio, magazines and newsreels. Should we swallow everything we read in our morning paper? What should we reject? What should we take with a grain of salt, and why?

Dealing With It Unemotionally

This study of propaganda is not, however, entirely a question of new subject matter. It's a point of view, as well, a point of view that should pervade almost every course in the curriculum. History, civics, government, sociology, economics—these subjects are knee-deep in propaganda; they concern the very issues about which there is the most propaganda.

Stripped right down to its core, the study of propaganda is the study of how to think. Not what to think—the propagandists want to tell us what to think, but we'd like to do our thinking for ourselves, thank you. It's the very antithesis of indoctrination, the first essential for this "intelligent participation in citizenship" that we hear so much about.

The chief danger of propaganda is that it appeals to emotion, and decisions made under stress of emotion often lead to disaster when the emotion crowds out cool, dispassionate thought.

Pupils and teachers especially should know how to deal with propaganda unemotionally.

Approximately sixteen million young people between the ages of fourteen and twenty will become voters in the next seven years. As such, they will decide issues affecting every aspect of democratic freedom—political, economic, social and religious. They cannot wait until they are twenty-one to learn how to decide issues unemotionally, critically, thoughtfully.

Propaganda which concerns us most is that which alters public opinion on matters of large social consequence often to the detriment of the majority of the people.

Many opinions or propagandas are highly charged with emotion, prejudice, bitterness. People make a virtue of defending their own opinions or propagandas. Many would deal with opinions or propagandas they do not like by suppressing them; by violence, if need be. But suppression of unpopular opinions or propagandas is contrary to democratic conceptions of government. A heresy or an unpopular propaganda or opinion may be bad or good. One way to find out is by analysis and classification according to types and interests.

To deal with propaganda by suppression through federal legislation would violate the Constitution of the United States. "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances." These freedoms are the essence of democracy.

Our Four Freedoms

Propaganda conforms to democratic principles when it tends to preserve and extend democracy; it is antagonistic when it undermines or destroys democracy.

Democracy has four parts, set forth or implied in the Constitution and federal statutes:

1. Political—Freedom to vote on public issues; freedom of press and speech to discuss those issues in public gatherings, in press, radio and motion pictures.

2. Economic—Freedom to work and to participate in organizations and discussions to promote better working standards and higher living conditions for the people.

3. Social—Freedom from oppression based on theories of superiority or inferiority.

4. Religious—Freedom of worship, with separation of church and state.

With all of these freedoms are associated responsibilities. Thus, with freedom of the press goes the responsibility for accuracy in news and honesty in editorials.

Inseparable from propaganda analysis are periodic appraisals of controls over the channels through

which opinions and propagandas flow: press, radio, motion pictures, labor unions, business and farm organizations, patriotic societies, churches, schools and political parties.

What convictions, biases and interests do these channels represent or express? Do these channels, by reason of bias, support and disseminate certain opinions, or propagandas and facts and alleged facts relating to them? Are other opinions or propagandas opposed by means of distortion, false emphasis or censorship?

Few persons have had the opportunity to learn how to detect and analyze propaganda. Most books on propaganda are for the benefit of the propagandist rather than for the public. Others are in technical terms understood only by persons familiar with the nomenclature of psychology and sociology. Furthermore, most of these treatises deal with propagandas of the past, not of today. It is today's propagandas flowing from today's conflicts which interest and concern us most. Propagandas used by Eugene Debs and the employers in the Pullman strike of 1894 are not as significant today as those being used in 1937 by John L. Lewis and Homer Martin, by Henry Ford and the Johnstown citizens' committee. The emphasis that high schools and colleges have given to dead issues of yesterday to the neglect of the living issues of today accounts for the fact that many high school and college graduates can be easily misled.

Teachers Favor Proposed Study

In August, 1937, several professors at Teachers College, Columbia University, and the school of education of New York University collaborated on a survey of teacher opinion with regard to propaganda analysis by students in high schools and colleges. They put the question to 500 teachers representing all states in the union and all types of schools. Ninety-eight per cent advocated a critical study in the schools of propaganda that would help prepare young people to function as intelligent citizens in discussing and voting on controversial issues; they said that in treating such issues in the school, teaching pupils how to think is more important than teaching them what to think.

When Administrators Meet

At Atlantic City in February

CHARLES B. GLENN

AT ATLANTIC CITY, February 26 to March 3, the school superintendents of the United States will assemble again to spend a week in attending meetings, participating in discussions and holding personal conferences. This is their sixty-eighth annual meeting. The official program will carry the new name adopted at New Orleans last February. By action of that convention, the Department of Superintendence became the American Association of School Administrators, a department of the National Education Association of the United States. Only its name is new. Its ideals of unified professional growth are unchanged.

The week at Atlantic City will be crowded with activities. The program will include nine general sessions and eighteen carefully planned group discussion meetings, six on each of the afternoons of Monday, Tuesday and Wednesday. Allied organizations will offer specialized programs on research, kindergarten, primary, elementary, secondary, rural, vocational and college education.

Ceremonial opening of the big exhibit is scheduled for Saturday afternoon, February 26. Mayor C. D. White of Atlantic City will speak brief words of welcome, and Earle F. Opie, president of the Associated Exhibitors, will respond. The ceremony will be concluded by the raising of the American Flag as Dora Davies Williams, soprano, sings one verse of a patriotic song. The program will be carried throughout the convention hall by the public address system.

Phelps Is Vespers Speaker

Dr. William Lyon Phelps will be the speaker at the vesper service on Sunday afternoon. As professor of English literature at Yale University for more than thirty years, his popularity among the students gained for him a nationwide reputation. As professor-emeritus since 1933, Doctor Phelps has become even better known through his daily newspaper comments on literature of the past

and present. The famous Westminster Choir will come from Princeton, N. J., to furnish the music for the vesper service.

Three well-known speakers will be heard at the Monday morning general session. Supt. A. J. Stoddard of Denver, Colo., chairman of the Educational Policies Commission, will speak on the theme, "The Challenge to Complacency." Chairman Floyd W. Reeves of the President's Advisory Committee on Education will discuss federal relations to education. The last speaker will be Dr. Charles H. Judd, who is retiring as head of the department of education at the University of Chicago, a position that he has held since 1909.

Yearbook Sessions

The Tuesday morning general session has been set aside for the consideration of youth problems. This is the topic of the 1938 Yearbook, and members of the commission that prepared the volume will be platform guests. The discussion will be opened with an address on "Youth and Education" by Supt. E. E. Oberholtzer of Houston, Tex., chairman of the Yearbook Commission. "Occupational Adjustment" is the timely subject selected by the second speaker, Edwin A. Lee, director of the National Occupational Conference.

The subject matter of the Yearbook will receive further attention in a forum conducted by John W. Studebaker, U. S. commissioner of education, who possesses remarkable skill in stimulating discussion. In addition to those named above, the panel will include Asst. Supt. Richard D. Allen of Providence, R. I.; Prof. Goodwin Watson of Teachers College, Columbia University; Supt. Homer W. Anderson of Omaha, Neb.; Supt. David E. Weglein of

Baltimore, and Homer P. Rainey, director of the American Youth Commission.

President James B. Conant of Harvard University will address the Wednesday morning general session. Doctor Conant is a scientist of distinction, as well as a university president. His subject will be "College Education in a Democratic Society." His message will be of particular interest since this will be his first platform appearance at a meeting of the American Association of School Administrators. On this same program, George F. Zook, president of the American Council on Education, will talk of "Teacher Education," and Supt. Orville C. Pratt of Spokane, Wash., recently president of the National Education Association, will discuss "Teacher Welfare."

The Friendship dinner on Wednesday evening will be an outstanding feature of the Atlantic City convention. This huge function will be held in the auditorium ballroom. Those who attend will enjoy a turkey dinner followed by an evening of entertainment by popular performers. Later that evening, an ice carnival and a dance will be held in the great arena of the auditorium. Skating acts by professional entertainers will make this event a spectacular one.

Smaller Discussion Meetings

Many of those attending the conventions have come to regard the smaller group discussion meetings as the most interesting and profitable feature of the whole program. They look to these meetings for a practical discussion of their everyday problems. In order that the Atlantic City group meetings may be challenging and helpful, they have been organized around live subjects. Six divisions have been set up, each under
(Continued on page 30.)

New Schools for Old in Los Angeles

IN FOUR years this city has built new school structures and rehabilitated old at a total cost of \$35,000,000. Now with the finest school plant it has ever possessed, the city school districts are grateful for the earthquake of 1933 which has produced this remarkable transformation in school facilities.



Van Nuys High School



Venice High School



Views of Hollywood High (above), San Pedro High (top, left) and Point Fermin Elementary (left). The entire program is now approaching completion, according to Willard S. Ford.

Mastery Tests in Spelling

BRIGETTA E. WENZEL

THE purpose of the inventory test in spelling is to discover the basic words that the pupil needs to study during the current month. The aim of the mastery test is to measure the pupil's spelling control over the unit for the month.

This report attempts to reveal the findings in a tabulation of mastery test results in a Detroit school.* These results were tabulated by half-grades, 2B through 3A, and covered a period of five consecutive semesters, from September, 1933, to January, 1936.

The tabulations for each unit for the five semesters were as follows: (a) the number of children in each half-grade having 100 per cent scores; (b) the number of children in each half-grade having scores with one error; (c) the number of children in each half-grade having scores with

content used were those suggested in a bulletin issued by the department of instruction. Consequently, the results should measure to some degree the purpose of the mastery test as it is stated in the bulletin.

Figures in the table were varied as follows for Unit 1, 2A:

Semester A, 47.5 per cent had perfect scores.

Semester B, 28.3 per cent had perfect scores.

Semester C, 46.9 per cent had perfect scores.

Semester D, 54.9 per cent had perfect scores.

Semester E, 40.6 per cent had perfect scores.

In checking the mental distribution during this period, we find that

or in other words the greatest percentage of X's as compared with the other semesters of the 2A grade. In this same semester, January, 1934 to June, 1934, the 2A grade had the least 100 per cent scores. Also, in the first semester of this survey the I.Q. average ranked lowest, that is, it had the lowest percentage of X's, while the test results at this time ranked second, or in other words, Semester A was second highest for 100 per cent scores.

Such variations were prevalent throughout the tables. At no one time was Unit 1 or any other unit in any half-grade consistently difficult. When a unit placed high in one semester, it placed low in another semester.

To simplify the tables compiled in the survey, an average of the units in each half-grade gives an idea how the various units ranked within the grade.

In Table I Grade 2B we find that for the average per cent of perfect scores, Unit II ranked easiest and Unit I ranked hardest. In Grade 2A Unit IV ranked easiest and Unit III ranked hardest. In Grade 3B Unit IV ranked easiest and Unit II ranked hardest. In Grade 3A Unit IV ranked easiest and Unit II ranked hardest.

Table II shows a similar picture, only in this table are presented the averages of the percentage of scores having less than half of the words spelled correctly on the unit test.

TABLE I—PERCENTAGE OF PUPILS ATTAINING PERFECT SCORES

Units	2B	2A	3B	3A
I	26.4	43.6	46.6	34.4
II	38.0	42.2	40.6	27.0
III	37.3	41.2	42.4	43.9
IV	34.4	49.3	56.7	46.8

For each unit in four half-grades, the foregoing table gives the five-semester average of the percentage of pupils attaining perfect scores.

two errors, and (d) the number having less than 50 per cent of the words on a mastery test correct.

In all there were about 1,400 cases; there were four tabulations for each semester for each half-grade covering a period of five semesters. The cases having the various scores were translated into percentages and all comparisons were made on that basis.

The first mastery test in each half-grade was called Unit 1; the next, Unit 2; the next, Unit 3, and the next, Unit 4.

When all the results were compiled, the picture revealed considerable data. During this time the teaching pattern followed and the

the average I.Q. was as follows for the 2A grade:

Semester A, 35.5 per cent.

Semester B, 50 per cent.

Semester C, 40.3 per cent.

Semester D, 45 per cent.

Semester E, 43 per cent.

This tabulation shows that Semester B had the highest I.Q. average,

TABLE II—PERCENTAGE OF PUPILS ATTAINING SCORES OF LESS THAN FIFTY PER CENT

Units	2B	2A	3B	3A
I	26.5	7.8	6.4	7.3
II	8.6	6.7	9.7	12.4
III	5.2	4.5	7.4	5.3
IV	3.7	3.1	1.9	2.3

For each unit in four half-grades, the foregoing table gives the five-semester average of the percentage of pupils attaining scores of less than 50 per cent.

*The test results discussed here are taken from records compiled in the Goodale School.

TABLE III—COEFFICIENTS OF CORRELATION

Units	2B	2A	3B	3A
I	-.72	-.10	.10	.62
II		.42	.0	.91
III		.52	.0	.92
IV	-.72	.0	.10	.62

This table shows the relationship between mental ability and achievement.

Earlier in the report instances were cited in which a high percentage of perfect scores did not consistently occur when the average class I.Q. ranked high. On the contrary high averages of perfect scores occurred when low averages of mentality distribution existed.

Table III attempts to show what relationship exists between achievement scores and mental ability. The validity of this table might be questioned because only five cases were

considered, but these five cases represented the averages of the total number for each half-grade. There are three negative correlations, eight positive, three of which are very small, and three units that show no correlation.

If mastery tests are to measure a pupil's control over a unit of work then it could be said that a perfect score would measure perfect control.

During this period of checking the teaching pattern followed was the

same throughout the grades. Supervision of methods was carried on by the same supervisor. There was little or no change in the teaching personnel, and the working habits of the children were developed more or less along the same pattern. Therefore, these points should have had a positive influence on the results of the subject matter taught during the month.

Also, perfect scores did not go hand in hand with mental ability. As the subject matter did not prove to be consistently difficult, that is, any one particular unit did not seem difficult for each grade that attempted to master it, one cannot attribute difficulty of subject matter as the cause for these variations. And so these possible factors in any learning process seemingly have carried no weight with these varied test results.

Leisure Culture as an Objective

FRANCIS J. FLYNN

THE schools of the future will be quite unlike the schools of yesterday. True enough, we shall still teach the essential subjects, we shall still give a certain definite preparation for the vocation or profession of one's choice; but in addition, we shall give definite instruction planned to aid the pupil in the wise and profitable use of his leisure time. This new field of education might well be termed character education or character building, since its aim is to mold a worthy character or citizen.

This leisure time is something comparatively new to our generation. In the past such a thing as leisure time was allotted to the idle-rich, to invalids and to the proverbial bum. The great majority of people had little or no leisure. Their working hours were from sun-up to sun-down.

How vastly different is the situation today! The great achievements of mankind have produced the machine age, in which the worker's hours have been reduced tremendously. The result has been increased leisure time. With the even greater scientific strides of today a

new type of civilization seems to be inevitable.

Now we might ask what part the schools are to play in this new era of leisure time. The answer is that the schools of tomorrow are going to play an even more vital part in the lives of human beings than ever before. The schools of tomorrow are going to teach the children not only what to do and how to do it, but also to live life in its fullest form. This, of course, means that they are going to focus their attention on the proper use of leisure time and to guide the coming generations in their choice of avocations.

The future promises an era of culture, not the so-called culture long associated with wealth, but rather a culture in which the intellect of man is cultivated for its fullest possible enjoyment during leisure.

Culture means the intelligent appreciation of music, drama, literature and all the related arts. Intelligently to control and guide our emotions when viewing a fine painting or listening to an excellent symphony orchestra, or reading a fine

novel or poem—these are the cultural aims of the schools of tomorrow.

Already much evidence can be produced to show the importance of this future training, and provisions are being made to meet this need. In practically all of the larger schools, especially the metropolitan schools, courses in appreciation of the arts, music and literature are held. In addition to these, courses are being offered in actual creative work in the various fields of art, music, book-binding, shop, pottery, art metal, and many others.

In order to build for this leisure time it is necessary to do more than offer appreciation courses. Schools must offer creative courses, courses in which the creative forces are applied. In the appreciation courses one will learn of the various avocations, while in the creative courses one will learn to apply that knowledge to everyday living.

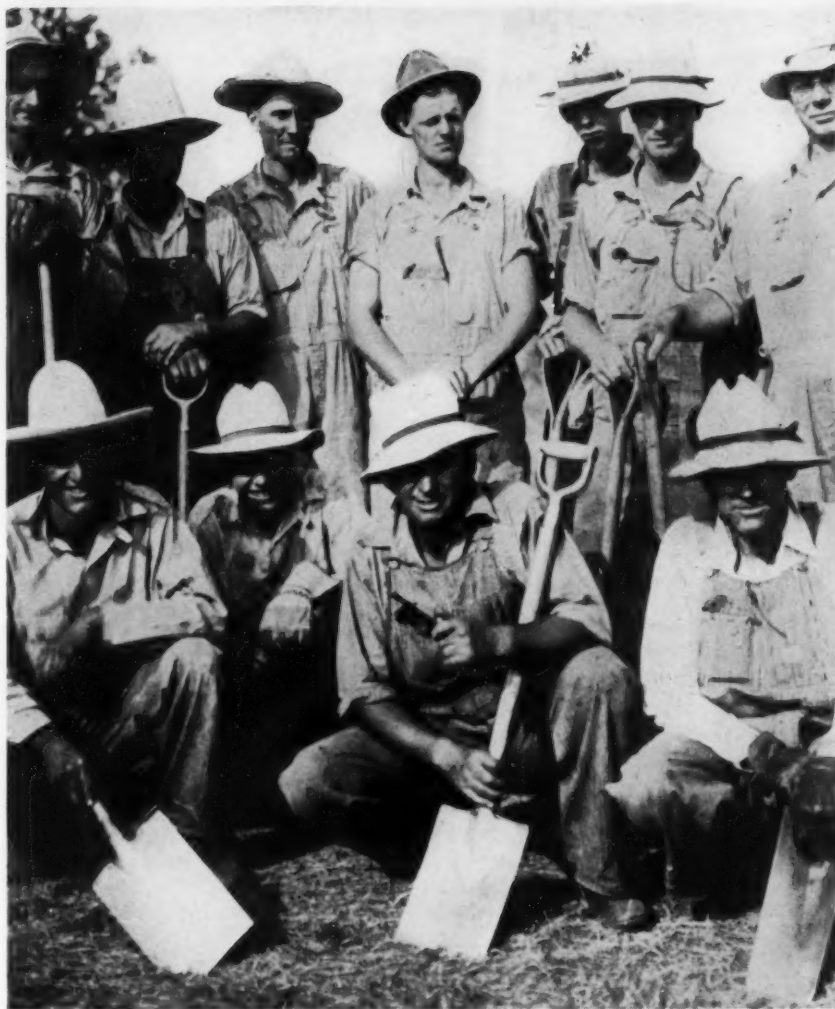
The development of a general appreciation of all that is fine in music, art, literature, science and government is the greatest single attribute to a full and rich life. The culture of tomorrow must be developed in the schools of today and with the schools assuming that leadership, the future will see a civilization more enriched, happier and more content.

One-Room Schools on the Prairie

MABEL S.
RICHARDSON

USUALLY the hardest place to win recognition for any accomplishment is in the home community. By this measure the model one-room school in Sioux County, Iowa, is a success. One hundred thirty-nine of the districts have approved and built them during the last eighteen years—"more than any other county," says the state department of public instruction. Neither depression nor unprecedented drought for two successive years has interrupted the building program.

These attractive buildings are erected at a cost of between \$2,700



Farmers meet to dig the basements of these Sioux County schools.

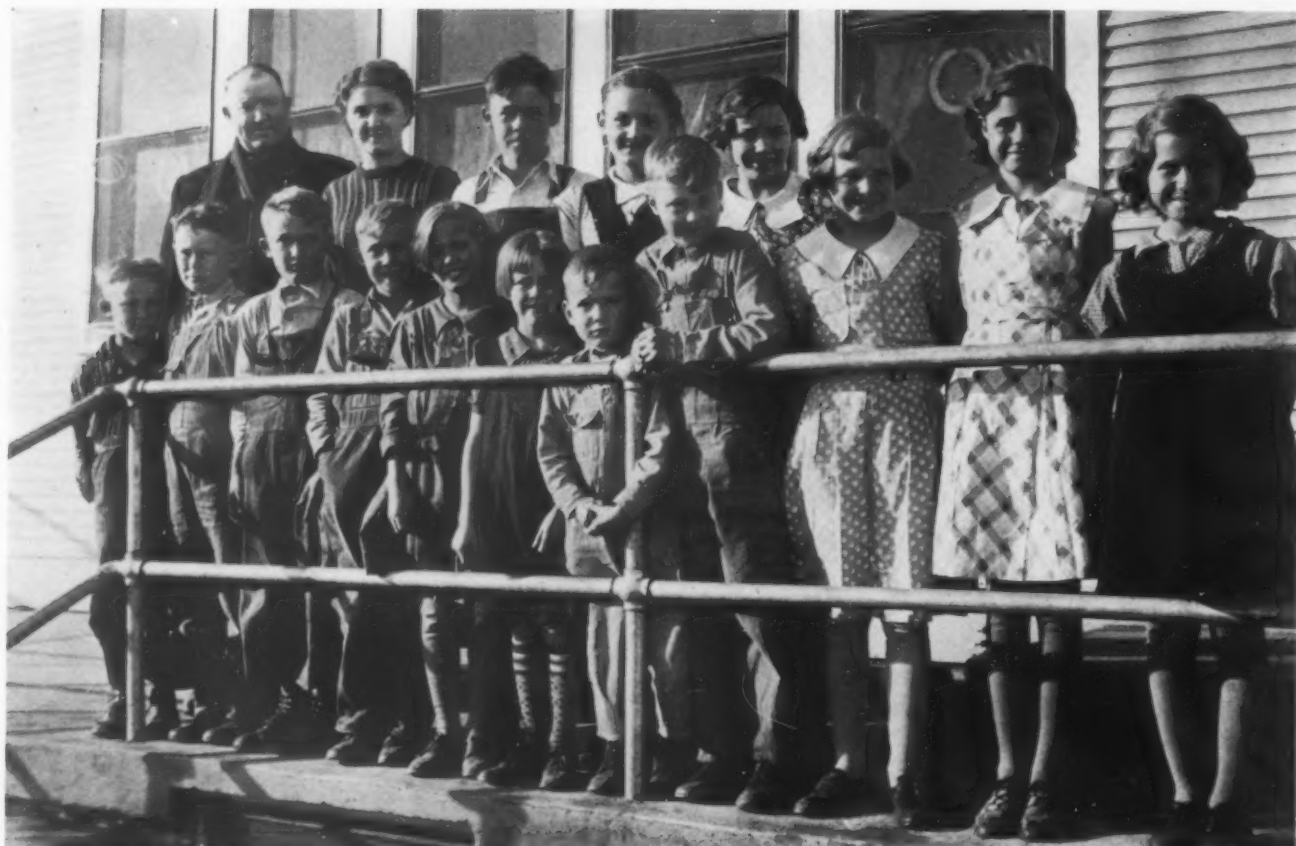


One of the cheerful one-room schools in Sioux County, Iowa, where neither drought nor depression has interrupted the extensive building program.

and \$3,000. They are constructed of wood and have a full cement basement which contains coal and cob bins, furnace room and an all-purpose room suitable for indoor play, dining room or committee room. The men of the district meet to dig the basements.

Upon entering the building the visitor is impressed first by the fitness of everything, cheerful walls, adequate light. When current is available the schools are wired for electric lights. Floors and furnishings are of hardwood and blackboards of slate. The book cases are the built-in type. Display background is good quality, attractively colored burlap, suitably framed. There is ample supply-closet and cloakroom space. Chemical toilets also are provided.

Every rural school in the county has had a cyclone cellar since a tornado passed through the county in the late afternoon of May 3, 1895, wrecking two schoolhouses, injuring many pupils and killing two teachers.



Close-up of the pupils in School No. 1, Reading Township, Sioux County, Iowa. The children seem happy over their comfortable schoolhouse and both the teacher and county superintendent appear to be well pleased, too.

A casual glance at the man primarily responsible for the building program might lead an observer to think that he would enjoy nothing more than to lean against a gate and watch the world go by. Observe him again, as he talks to a group of teachers or fellow superintendents. He is alert and commands the attention of the group. He has the ability to execute blueprint specifications and leave each one concerned thinking it was his own original idea. This is attested by the fact that Charles H. Tye has been elected six successive terms in a state in which the office of county superintendent is not political.

In the spring of 1917, Mr. Tye assumed office, determined that the schools of Sioux County would be made adequate for rural pupils. To that avowed ideal twenty years have been devoted.

Twelve years as a city superintendent in southern Iowa left him with a strong preference for the consolidated school, and one was built. However, it did not seem best to meet the need of the community at the time. The principal objections then were the ungraded, dirt roads and the wish of the patrons, many of whom were

only recently naturalized, to keep the school unit in the immediate community.

Mr. Tye immediately began a careful survey of the problem and was able to solve it through his own experiences as both pupil and teacher in the country school and through intensive study and research while in normal school and college.

The model one-room school was the result. In 1936 there were 2,562 rural pupils in the 155 schools of the county. Of these 139 are model one-room schools, five are two-room schools with two teachers and 112 are standard, drawing state aid.

It is not enough to be known as the county that has built the most rural schools or to have 72 per cent of these schools drawing state aid while the average for the state is only 25 per cent.

The office of the department of public instruction says, "Mr. Tye is now at work building up the instructional equipment so as to bring that up to the standards used in the better

schools. When this is completed it will be another fine step in advance."

It is at least "a gallant approach" to the ideal rural school plant.

When Administrators Meet

(Continued from page 25.)

the direction of a general chairman who is responsible for planning a series of three group meetings.

The chairmen and themes are: "Education for Adjustment," Ben G. Graham, superintendent of schools, Pittsburgh; "Vital Relationships," Jesse H. Mason, superintendent of schools, Canton, Ohio; "The Improvement of the Public Schools," George C. Bush, superintendent of schools, South Pasadena, Calif.; "The Expanding Program of Industrial Education," J. W. Ramsey, superintendent of schools, Fort Smith, Ark.; "The Curriculum," J. C. Cochran, superintendent of schools, San Antonio, Tex., and "Youth Problems," E. E. Oberholtzer, superintendent of schools, Houston, Tex.

Portland Gets Its Man

J. R. JEWELL

EARLY in 1937, as Supt. Charles A. Rice, who had been connected with the Portland schools for twenty-seven years, approached the retirement age, the board of education found itself in a quandary as to the best means of judging the comparative fitness of candidates. Applications began to come to the board in considerable numbers once the news of the impending vacancy was carried by the Associated Press.

A city of more than 300,000, the school problems were in certain ways unusual. State aid is practically negligible and will be for some time to come. The schools are organized on the 8-4 plan, the platoon type of plant is typical, while there is not a large junior high school in the city. Superintendents have had long periods of service, the administrators and administrations have been strong ones, and power typically has flowed from above.

Deciding to avail itself of professional help, the board selected a committee composed of President Elam J. Anderson of Linfield College, Dean J. R. Jewell of the Oregon state system of higher education and Prof. S. Stephenson Smith of the University of Oregon, to present a final suggested list of five or six names from which the selection presumably would be made.

After consultation with representatives of not less than a dozen interested groups of citizens, the committee set up a seven-point standard for the evaluation of candidates: scholarship, elementary and secondary school experience, feeling for religious values, cultural and esthetic interests (Portland supports one of the better symphony orchestras of the country and has public art galleries and libraries in which it takes a natural pride), grasp of educational problems of a vocational nature and a record of progressive leadership.

Two sets of blanks were formulated, that comparisons between the candidates so far as these criteria were concerned might be made more easily. One unusual item, a final one on the questionnaire sent to possible candidates, evidently caused them more concern than all else. That was an "essay" explaining "educational

ideals and motivating goals." Certain men wrote they did not care to be considered if candidacy were made dependent upon the writing of an essay. A few "essays" of an exceedingly platitudinous nature were received. The committee now feels that in numerous instances it found itself the better judge of what this

Form Used in Obtaining Information Concerning Candidates.

You have been named by _____ who is a candidate for the position of Superintendent of Schools of Portland, Ore., as particularly qualified to report concerning his

In formulating the questions below, the aim has been to search out individual characteristics—the strong and the possibly weak points of the candidates. Please give us this cross-section picture of this man as you know him, so we can think of him as a normal person with differential abilities. We do not expect to choose a man who is reported as "exceptional" in every way, but rather one who is outstanding on those points which are most significant to the city of Portland. We will appreciate your careful and prompt reply to as many of the following items as you can answer. Thank you!

Yours very truly,

Advisory Committee:

Elam J. Anderson
President, Linfield College
J. R. Jewell
Dean of School of Education
University of Oregon
S. Stephenson Smith
Professor of English
University of Oregon

S. STEPHENSON SMITH
Secretary, Advisory Committee
University of Oregon
Eugene, Oregon

1. Can the candidate efficiently manage a large organization? (The Portland schools have an annual budget of \$7,500,000, properties of \$25,000,000, staff of 1,650 teachers.)
2. Does he now have or will he be able to formulate a well-planned and coherent educational program?
3. Have you thought of him as having achieved particular recognition in the field of education, by writing or speaking appearances or organizational service?
4. Do you know if he has been "progressive" or "conservative" in reaction to changes in course of study?
5. Can he plan the several supplementary fields of the high school, the junior high school, the elementary school and vocational schools for adolescents?
6. What has been his attitude toward adult education and community service through the schools?
7. Is he indifferent, approving or active toward, respectively, community musical enterprises such as Portland's symphony orchestra and numerous vocal choruses, toward the city library with its scholarly interests, toward trade schools and toward colleges of liberal arts?
8. In politics and public relations is he dogmatic or diplomatic, and has he ever "played politics" in his school organization?
9. Has his educational leadership been democratic or dictatorial?
10. Does he take counsel with his teachers and with the public?
11. Has his work shown a particular and genuine influence of ethical and religious values?
12. Has he shown what he considers to be true values for living?
13. Does he make a particularly favorable personable appearance?
14. Has his health been generally good?
15. What would you consider the weakest point in this candidate's qualifications for this position?
16. Has he brought any educational enterprise, for which he had the principal responsibility, to a decidedly more progressive state than when he began with it? Please explain fully.
17. Can you give us any additional information in the field where the candidate considered you particularly qualified to report (see first paragraph of letter)?

or that man would like the opportunity to try his hand at. Blanks were mailed by the committee to more men suggested by prominent school administrators of the country than to active applicants.

A constant reference to tabulations summarized from the returned questionnaires made it possible to give proper consideration to men of solid attainments rather than to be swept away by the personality of a candidate with a flair for some certain enthusiasm of any one of the "pressure groups" now so much in evidence in our national life. Certain men did not seem so appealing after their qualifications had been set down as in contradistinction to those of other men.

Late in the summer two members of the committee interviewed a considerable number of those applicants who seemed most worth consideration, the peculiarities of the Portland situation being kept in mind. Seeming enthusiasms were probed, records of achievement were looked into. An illustration may make the procedure and reason for it more clear. During 1937 and 1938, because of the age retirement of supervisors and principals in Portland, there will be as many changes in key positions as in the last twelve years. The committee was interested in the human equation—how successful had an administrator been in selecting his assistants, principals, key men, and how had he got along with them afterward?

Late in August the committee handed the board a panel of six names: Supt. Elmer Breckner, Tacoma, Wash.; Supt. Ralph E. Dugdale, Toledo, Ohio; Assistant Supt. Willard Ford, Los Angeles; Dr. Earl C. MacInnes, McKinley School for Boys, Los Angeles; Supt. J. W. Ramsey, Fort Smith, Ark., and Supt. I. E. Stutsman, St. Joseph, Mo. Several of these men had approached neither the board nor the committee on their own initiative. The board brought each man to Portland for a sufficient length of time to enable each to become acquainted with the city and its problems, and in turn to be evaluated by the individual members of the board. Shortly before September 1, Supt. Ralph E. Dugdale of Toledo was unanimously elected and almost

immediately assumed the responsibilities of the superintendency of the Portland school system.

As this matter is brought to a conclusion, there seem to be few, if any, illusions as to what has been accomplished. It has been evident to interested groups of citizens, such as the parent-teacher associations, the commercial interests, the art and music lovers, and those concerned with the vocational trends of the times (using these merely as examples), that the committee took their interests into account in the formation of the criteria set up in the beginning. The country was looked over rather thoroughly, and in several instances candidates were made available because they were recommended by administrative experts as having capabilities that might be peculiarly valuable to the city of Portland. The man finally selected was not "hand picked," either by the committee or by any pressure group, but was selected by

the board from a panel of six, any one of whom would, it was felt, have given Portland a highly successful administration of educational affairs.

The new superintendent went into office with no obligations to anyone save the people of the city of Portland and its school children. His candidacy was urged neither by the committee nor by any interested citizen nor group of citizens who might be thought later to have had an axe to grind. The board was saved the annoyance of being subjected to high-powered salesmanship on the part of either self-seeking candidates or their friends.

The committee gave a great deal of time and energy to the matter, entirely without compensation, it is true. But the members of the committee, now that it is all over, feel that they have, as best they could, rendered a professional service both to the school children of Portland and to the profession as a whole.

Essentials of Health Education

JAMES EDWARD ROGERS

HEALTH and physical education is an area in education. It is more than a subject in the curriculum. It is a whole field of educational knowledge and practice. Besides being an area of education it also is an administrative unit.

From the point of view of the administrator there are several aspects to be considered. There are auxiliary activities such as health services provided by doctors, dentists and nurses and also supervision to ensure cleanliness, sanitation and school hygiene; and there are the instruction and the actual activities program itself.

There is a trend in our state departments of education and in our large city school systems to bring all phases of school health and physical education into a unified central department.

The problem is to find men and women capable of supervising and conducting the four phases of the school program—health service, health supervision, health education and physical education.

Every pupil should be a fit person to work with. Health examinations are essential, especially for the discovery of remedial defects. Every child should be free from those defects that interfere with his learning. It is a crime that many children are handicapped in their educational progress because of physical defects. If children are to be kept healthy, long periods without relaxation or recreation must be avoided. There must be fewer examinations and less homework to cause worry and strain. The wrong kind of punishment and too high standards are baneful.

The school's job is to train boys and girls in health education for wholesome living. The physical education program should be planned to build organic physical power and fitness and should further give the pupils recreational pursuits that can be carried into adult life. Instruction in safety measures as a protection from fire, traffic and other accidents should be part of the course. Athletics should be based on sportsmanship.

Nationalism in Latin America

ERNESTO GALARZA

DURING the past year or so a marked trend toward nationalism has characterized Latin American education. Many governments have become especially concerned with the rural population living on the territorial fringe, where it is felt that sentiments of patriotism and national loyalty should be particularly strong. The lack of schools in these frontier areas has led many educators to fear that large numbers of future citizens will come of age without having become strongly imbued with the culture and viewpoint of their fellow citizens.

These Subjects Stressed

To counteract this possibility special efforts have been made (Argentina, Mexico, Peru, Bolivia, Uruguay) to study educational problems in these areas and to set up schools equipped to meet them. In general, the feeling has gained ground that the school is the best means for the maintenance of cultural, social and political characteristics of the nation. That the schools may continue to ensure national integrity, increasing stress has been laid on the study of local history, geography and politics as well as on civics and patriotism.

Secondary schools (Chile, Peru, Venezuela, Argentina), in particular, have been thought lacking in a nationalist orientation, and too concerned with the preparation of pupils for university and professional careers. Changes have been made in the curriculums which look to the strengthening of the nationalist outlook as well as to the theoretical and practical training of pupils who will not continue beyond the secondary school. The great disparity which is usually evident between the enrollment in the elementary and secondary schools has been recognized as a major problem, the solution of which must await increases in expenditures.

Normal schools have undergone standardization in courses of study

and in administrative practices, and a limitation of enrollment through the enforcement of higher standards (Mexico, Argentina, Brazil, Venezuela, Chile). Uniform practices within many of the Latin American republics have been set up with a view to facilitating transfers, entrance requirements and establishing norms for teacher rating. The limitation of enrollment has been sought and attained through the efforts of both government officials and teachers in service. The former have found it increasingly difficult to place normal school graduates in the state schools. Although the need for a larger number of classroom teachers is evident in the teaching load, which in some cases reaches a ratio of 100 pupils per teacher, the restricted appropriations of the depression years have not recovered sufficiently to allow an increase in appointments. Aside from the enforcement of higher standards, restriction of enrollment in normal schools has been achieved by limiting the granting of licenses by state and provincial authorities.

Education Is Interrelated

Rural education, as in the past, has shown the close relationship that exists between racial, cultural and economic problems so far as the education of the masses is concerned (Bolivia, Colombia, Cuba, Uruguay, Ecuador). The rural school has been required to carry a heavy load of social welfare work, industrial training, adult education and technical progress. On the whole, the principal function of the rural school has been the training of boys and girls to make economical use of the raw materials at hand, to meet their own needs as consumers and to develop small, local industries.

In a period of economic contraction, this view of rural education is the only one that will permit the state to fit its philosophy to its in-

come; but it is a question how permanent this view might be should the social forces at work before the depression once more resume their course. Highways, for example, which are slowly spreading in a huge network over the continent, have tended to favor large-scale production for the market as against local industries for home use and for barter. Basically, the problem consists in the unproductiveness of antiquated methods in farming, the consequent impoverishment of rural communities and the drabness of life for pupils and teachers in those areas.

Offers Rural Teachers Bonuses

In attempting to correct this situation, which causes teachers to be unwilling to remain long in a rural school, various governments, notably that of Cuba, have offered inducements in the form of higher salaries or bonuses.

The interest in modern educational methods, especially in the elementary grades, has become more intense. Several new magazines (*Caminos* of Panama, *Nueva Escuela* of Cuba, *Cronica Educacional* of Argentina, *Educacion* of Bolivia) have been founded to disseminate information concerning those methods and to stimulate research and interchange of ideas. Secondary and normal school curriculums have been reconstructed (Costa Rica, Mexico, Chile, Peru, Venezuela) to lessen the traditional emphasis on memorizing, textbook instruction and passive learning. This movement, although stimulated by the writings of foreign experts, is characterized by caution in not attempting to apply foreign ideas without adaptation to local peculiarities and needs.

On the whole, the introduction of the activity program, on the elementary level particularly, has been beneficial largely in the searching theoretical discussion of principles that it has provoked. It has also led to the establishment (Uruguay,

(Continued on page 37)



Newspapers offer pupils valuable lessons in history, in economics and in the technique of news gathering.

Pitfalls in School Publicity

FREDERICK JAMES MOFFITT

THE young school executive, nurtured by the alert teacher training institutions of today, recognizes that the interpretation to the public of his school is an important part of his job. He steps forth from academic halls thoroughly convinced that he must put into practice a comprehensive public relations program in order that his schools may function to their best advantage in the community. The older superintendent of schools, who may have obtained much of his training in administration by actual contact with the work, has arrived at the same point of view.

Simpler times may have allowed for an incidental interpretation that could be handled in haphazard

fashion. The school of today, accepting as it has, added responsibilities and new complexities, vitally needs interpretation that is thoroughgoing and based on sound techniques.

Most school executives have confidence in their ability to handle techniques of the public relations program. The young administrator is likely to evidence a brashness that will carry him a considerable distance along the difficult path of school interpretation.

Has he not given the matter considerable thought and study? Is he not thoroughly conversant with the

three M's of the public school interpretation field: Miller, Moehlman and Morgan? Is he not ready to make friends with the newspaper editor and captivate the reporter with his knowledge of newspaper work? Has he not obtained considerable fame as editor of his college annual and was he not commended by the instructor in the course in journalism?

With careful consideration, the young school executive follows the procedure that has been given him by the masters. His interpretation of the school is dignified, perhaps slightly aggressive, but tolerant of



The radio offers a new and rapidly expanding avenue for presenting school projects to the public.



The staff of the school newspaper (above) meets with the superintendent to discuss policies for interpreting school activities to the public. Left, Parents' Night brings out scores of interested patrons to observe classes in session and to participate in the discussions. For many adults, it is their first visit since their own school days.



the busy school patron. A steady flow of information is given to the public, falling like dew upon a parched landscape. The administrator neglects neither the honor rolls of pupil achievement nor the little human interest stories that crop up in the third grade. He uses every faculty for interpretation that is within his reach—the radio, the school newspaper, the mimeographed bulletin, the report card.

His relationships with parent-teacher association members are cordial. He orates at request with understanding and sympathy at their ig-

norance. He does not even stop with the local group, but carries the message to the parent-teacher associations throughout that section of the state where his fame as an interpreter has spread, telling them with candor and frankness what is wrong with education and the remedies thereof.

His annual report to the board of education is a masterpiece of thoroughness and besides, it is quite readable. His commencement exercises are models of dignified interpretation with himself cast in the heroic rôle of chief interpreter. Even his personal uprisings and downittings are

beyond reproach and his wife cultivates the best people in the community. The service clubs of his community clamor for interpretation of the school, particularly when the regular speaker for the day has not shown up.

Then suddenly, inexplicably, shockingly, the whole program goes to pieces. Attacks arise from taxpayer groups, there is a discordant murmur in the P.-T.A., the newspapers seem less friendly and sharp criticism arises without any reasonable foundation.

What is wrong?

Perhaps, a sharp, critical reevaluation of his public relations program may point the way to happier times. An inventory will do no harm to the beginner or to the seasoned veteran who knows that public opinion may veer with every wind that blows. The interpretation of the school is an elusive, tenuous art not easily solved by geometric formula. It is a personal skill that must

be adapted to the community and changed with changing times.

It might be well to review some of the fundamental precepts laid down by the authorities on school interpretation and relearn them before a new program is launched.

Thus: Interpretation of the school is vitally necessary in every situation from the city to the crossroads hamlet. Such interpretation must rest primarily with the school administrator. If he does not accept the responsibility, it will be done anyway and probably to the detriment of the school. Interpretation must be intelligent, honest and understandable, continuous and well done.

"But I have learned all of these precepts and thus have I practiced. Yet, my public is apathetic, even hostile. There must be something I have left undone."

Perhaps, then, there has been neglect of the foundation stones on which all real school interpretation must rest—a good school, a contented teaching force, clean buildings, professional alertness throughout. These factors lead into such diverse studies as guidance, discipline, salary schedules, janitorial efficiency and general school administration. Yet, without them, school interpretation may be likened to the cacophonations made by the littlest trombone player in the grade school orchestra—loud, sour and distressed.

Accuracy in Facts Is Essential

Or, the executive who faces a breakdown in his school publicity may not have been completely honest and careful of his basic facts. Has he given only partial and misleading reports and too often left himself open to charges of misrepresentation? This is a common form of sloppy interpretation that occurs through carelessness rather than deliberate evasion of the issues at stake. Figures don't lie, but liars figure, said McAndrew, and before him, Aristotle.

There is nothing that irritates the school patron more than to be confronted with half-truths and to be led astray through his own trusting friendship for education. In the heat of building programs or the increase of budgets for the most worthy items, there is an excellent chance for hon-

est-to-goodness school interpretation. But half-truths then issued have a way of coming back to plague their author in more conservative times. If the school executive is indeed responsible for the interpretation of his school, let him assume the same careful probity in his speeches and his reports that he must in his private life. Let him avoid, too, the flamboyant, inexact language of the movie previews. Let him avoid the circus type of publicity unless, as sometimes is the case, he feels that he is ringmaster of a circus.

Conservative Publicity Is Best

This is no plea that the public relations agent assume the language of the research student, who qualifies every statement until the reader is completely confused as to his real purpose. Rather, it is a suggestion that school publicity lends itself to a certain conservative type of interpretation that is foreign to the more violent interpreter.

There are those who would interpret with the blare of bands and the yells of the sport arena. "The uniformed band is about the best friend maker that the average school has," says one authority carried away by the martial stir of the school militant; "both the educational and the publicity values of the school band are high."

With such a conception, we must not quarrel too severely. The school must be interpreted from every possible angle and no legitimate type of interpretation may be ignored. Togas for the Latin classes as they lead a snappy march down Main Street might also be worth while and might stimulate the educational program in a field that has been long neglected. But it is suspected that the cost would be excessive and the educational program might not be improved. These are considerations that every school leader has to decide for himself.

Another common fault in school publicity rests not with the interpretation but with the interpreter. He is a little too smug, sometimes, too self-satisfied with his own procedures. Or he adopts a holier-than-thou attitude which is quick to stir public resentment. The public grows tired of complete perfection.

Sage school administrators eschew the "smart-alec" type of interpretation. They assume that the public is reasonably mature in its thinking and in their public contacts they attempt to lay aside their pedagogic voices and mannerisms. Fortunate is the school superintendent who can address a grade school assembly with due humility for his own learning. If he can put his message across, he is headed for great advancement in the educational world and his teaching staff looks at him with respect for his scholarly attainments. Twice fortunate is the superintendent who can meet his public in the same humble spirit of understanding, for he can usually get what he wants with a minimum of criticism from the members of the School Improvement Society.

Another mistake sometimes made in the public relations program is by the interpreter who has lost the common touch and forgets that he is in charge of all of the children of all of the people. His erudite tracts are aimed at the more educated of the school patrons, his social contacts are with the "silk-stocking" crowd, and his P.T.A. becomes a social organization which assumes a condescending attitude toward problems of the underprivileged group. The largest taxpayer is approached with enthusiasm while the little fellow is neglected.

No Class May Be Favored

In his zeal for support from the local chamber of commerce, the executive forgets the struggling home owner who may be behind in his taxes but who has furnished more than his full quota of pupils for the school. This is no argument that the support of the chamber of commerce is not important, but it is easy to forget that the schools are run for the democracy and that they are built with a different philosophy than the private school enjoys.

The techniques for reaching the less fortunate group in the community are difficult to learn, but the learning repays the school interpreter many times. The public school can never afford to recognize any particular clique, group or class. School interpretation must aim at every person in the community.

An even more common mistake, made particularly by the young superintendent, is due to overenthusiasm and lack of planning in his attempts to reach the public with news of the school. In his haste to get a complete public relations program into existence, he speeds up the process of informing the public. He deluges the newspapers with material, he urges the school organizations into a multitude of activities and adopts the tactics of a high-pressure stock selling campaign—with disastrous results. His purpose is to get the school talked about. He often succeeds beyond his most optimistic planning.

Schools Not Front Page Stuff

The school relationship to the public lends itself indifferently to haste. School procedures are seldom spectacular and are not often of the stuff that makes the front page of the newspaper. No pep campaign can place the school on the front page permanently.

If the proper school publicity has been ignored by a previous administration, time should be taken to plan a gradual campaign in line with the principles of education itself. The school has had a slow, natural, logical growth; often, it is true, lagging behind other social institutions more than its ardent supporters might wish. The public has accustomed itself to a conservatism which may be discouraging to the school administrator, but such habits cannot be conquered overnight. An excess of ginger will do more harm than good. True, the do-nothing policy in public relations will result in continued inadequate educational facilities and indifferent schools, but a sudden, high-pressure campaign will remedy the situation only temporarily. Proper public and school relationships come only after a long-time program, carefully considered with a comprehensive knowledge of school and community needs.

Lack of speed in the program of school publicity does not mean, however, that the interpreter should not overhaul his machinery of interpretation occasionally. The procedures of yesterday are no longer adequate for a school whose secondary population has doubled and redoubled and

whose young people have changed in attitude and objectives. Startling methods may be frowned on but originality is always in demand. In the magazine world, staid periodicals have given way before a public that takes its news on the run. Interpretation methods are changing rapidly outside the school and the interpreter may well give thought to these sociologic phenomena.

Possibly the gravest of all the dangers of school interpretation is encountered by the schoolman who starts out with the best intentions in the world and finds to his dismay that the net result of his efforts is a bombastic interpretation, not of the school, but of himself. It is a real and ever-present danger. The school superintendent has no "White House spokesman" to help him in his publicity. He has no such safeguards as those by which the medical profession protects members nor has he the warning signals that have come to that profession after years of patient experimentation with publicity.

What is the remedy? Unceasing vigilance in his relationship with the press helps, commonsense helps and a profound passion for anonymity helps. Sometimes he may be able to go with frankness to the editor of the local paper and place the situation before him. But in spite of every precaution on the part of the

school executive, the attitude of the press and the public toward him as "news" is an ever present danger.

If, as sometimes happens, the superintendent loses his sense of balance and develops the headline complex, if he welcomes the newspaper photograph and the social column recognition, he is playing with dynamite. The school must be interpreted, yes, but if it is ever interpreted through any one personality (superintendent, president of the school board or director of guidance), be that personality ever so sparkling, the entire public relations program is likely to fail.

If the school executive survives his mistakes, he will realize that the learned textbooks on school interpretation are based on wide experience, that the procedures recommended therein are not wrong, but that he may be wrong in his own understanding of those procedures.

Interpretation of the school we must have and the school administrator must be the main agent for the interpretation. If he bumps his head against the wall of public indifference, if he stubs his toe on the rock of the public press, if he loses his professional dignity at seeing himself misquoted and misrepresented, it may be that he had it coming to him. He will become a better interpreter through such experiences as these.

Nationalism in Latin America

(Continued from page 33.)

Venezuela, Bolivia, Brazil) of experimental schools which in time will test the practicability of those theories. The increase of school expenditures that a progressive type of instruction implies has not materialized, leaving the introduction of progressive education a responsibility that falls largely on the teacher.

The important bearing that problems of health, housing and nutrition have on the problems of teaching has been more recognized (Argentina, Costa Rica, Uruguay, Ecuador), giving rise to a series of studies on those problems. Such studies, particularly those on the medical

services provided by the schools, are limited in scope but promising in their spirit and method. Physical education has been actively promoted, particularly in the Central American republics, Peru and Chile. The cooperation of parents and lay associations in home and community adjustments of school children, especially those of the poorer classes, has been stimulated by increased knowledge concerning those problems. Many *patronatos* and parent-teacher associations have been successful in the provision of free lunches, the distribution of clothing and the opening of summer camps.

Pegs for Publicity

DONALD L. DAVIS

EFFECTIVE newspaper publicity is the product of well laid plans, not afterthoughts. Yet, just as surely as some school administrators this week are planning publicity for next week's activities and events, others are calling newspapers to request publicity on events that occurred last week.

Superintendents and principals charged with the responsibility of conducting a public relations program without the assistance of a specialist should not be expected to know the many techniques employed in publicity work, nor should they be expected to possess that peculiar quality called "a nose for news." They should know, however, that timeliness is essential in a news story. It is worse than useless to try to give the city editor of a daily newspaper a story that is two days old. To do so is to invite him to fall back on his own resources for school news—a situation that most educators consider unsatisfactory.

The administrator who realizes that news is perishable can maintain favorable relations with the local press even though he may have only a vague notion of what makes news. A little foresight and a desk calendar are all he needs for a good start. The calendar will help him get information to the papers at the right time.

No Need for "Faking"

Chief among the problems that face all publicity directors is the search for opportunities to release the information they want the public to get. Their constant concern is to find timely "pegs" on which they can "hang" a story. In some fields of publicity work good "pegs" are hard to find, and the director is forced to make his own opportunities, to fake situations for stories. But the person who handles educational publicity is more fortunate; he has enough ready-made opportunities

to keep him busily occupied throughout the entire year.

The very routine of school affairs suggests many "pegs" which should be noted on the desk calendar. If schools open on the second Monday in September, the calendar may list such items as:

Wednesday, September 1—Remind papers of opening date; ask what information is wanted.

Tuesday, September 7—Release information on anticipated enrollment, improvements to school buildings during the summer, faculty changes.

Thursday, September 9—Announce information to parents on registration of pupils; offer to help papers get pictures on opening day.

Monday, September 13—Give papers first-day enrollment; also statistics for previous years.

Special Days Are Good Copy

American Education Week is a rich source of publicity material. The first reminder on the desk calendar should be well in advance of the actual opening date. At least a week before the observance begins, the administrator should find a notation on his calendar telling him to give the papers a statement on local plans for American Education Week. Other advance stories may follow, the number being dependent upon the extent of the local observance and the resourcefulness of the person handling publicity. Daily accounts of activities may be used throughout the week of the observance.

Another calendar notation about a month before the end of the term should serve as a reminder for stories on closing activities. The number of pupils to be graduated, with comparative figures for previous years, is good material for the first story. This may be followed by detailed plans for commencement exercises. The administrator should be pre-

pared to supply the names of all candidates for graduation and pictures of the senior class officers.

School activities often are centered around important dates, among them: Constitution Day, Columbus Day, Armistice Day, Thanksgiving, Christmas, Lincoln's Birthday, Washington's Birthday, Easter, Pan-American Day, May Day, Mother's Day, International Goodwill Day, Decoration Day and Flag Day. To be usable, information on such activities must reach the editor prior to the day of observance.

Also potential sources of publicity are the numerous special weeks which are observed with appropriate activities in many schools. Examples are: Book Week, Boys' and Girls' Week, Fire Prevention Week, National Constitution Week, National Hearing Week, Recreation Week, Safety Week and Thrift Week.

The foregoing suggestions do not begin to exhaust the possibilities. In every community and every school there are many other activities and events of sufficient public interest to warrant newspaper coverage. Knowing about these affairs long before they take place, the person handling publicity may plan to notify the newspapers in time for them to get advance stories.

Can Acquire News Slant

A desk calendar, however completely filled out it may be, does not make a publicity program. To develop and execute a thorough program is a job for a specialist. Busy as the administrator may be, he still can find time to make a few telephone calls and to grant an occasional interview to a reporter or suggest to him angles for features.

By studying the way each story is handled, the administrator can learn to anticipate the editor's reaction. In time he may be able to recognize the kind of information that never reaches the composing room and the kind that results in good educational publicity stories.

Cooperative Enterprises

Between Schools and Private Agencies

M. M. CHAMBERS

ONLY a few months ago the highest court of West Virginia handed down a decision that has important bearing upon several current trends in public educational administration. The legal question at issue related to the power of a board of education to lease its property; but the circumstances of the case also brought into view a number of other questions, including (1) public responsibility for the health of school pupils, (2) the duty of a board of education to provide recreational facilities, and (3) the manner in which a board of education may enter into cooperative arrangements with private nonschool organizations looking toward the welfare of pupils in the public schools.

Leases to Junior League

The Cabell County board of education, in direct control of the public schools of Huntington, owned an unimproved tract of approximately three acres in an outlying section of the city. In 1936 the board leased this land to the Huntington Horse Show Association, which is a creature of the Junior League of Huntington, a branch of a nationwide organization of young women "banded together for the purpose, among others, of engaging in community work of benevolent, charitable and civic nature, and of procuring funds for its chosen work by means of dues from its members, contributions by like-minded persons and such public entertainments or exhibitions as may, by paid admissions, provide or enhance receipts available for the purposes of the organization."

The Junior League formed the horse show association as a means of raising funds to be used in connection with a clinic which it established and maintained in the city for the treatment of all children from the age of six to sixteen who need med-

ical or surgical attention by reason of bodily infirmity or disease and are not otherwise financially able to obtain it.

The board of education, convinced that this enterprise was a commendable one to which it might properly give countenance and support, in view of the fact that some school pupils could receive needed clinical services therefrom free of charge, decided to assist the undertaking by entering into the lease brought into dispute before the court.¹

The lease was for a term of twenty years at a rental of \$1 a year "for the purpose of conducting horse shows, fairs and livestock, horticultural, agricultural and similar exhibitions, and for use by the Boy Scouts and similar organizations." When the land was not so in use, the lessee agreed to "permit the use of said premises for athletic practice, meetings or events and for recreation for school children" upon written request of the board of education. The board of education reserved the right to terminate the lease on one year's notice after June, 1938, if it should decide either to erect a school building on the premises or to sell the land. The lessee agreed to remove all improvements within ninety days after the date of the expiration of the lease.

Court Defines Limitations

The suit was brought by certain residents of the neighborhood who objected to the proposed use of the school property and questioned the legal authority of the board of education to put it to such use. The court held that although the board may exercise reasonable discretion as to the use to which its property shall be subjected, pending the time when it

will be devoted to school purposes, "this does not mean that where valuable property has been acquired by a board of education for school purposes, through expenditure of a large amount of public funds, it may enter into a long-term contract, placing the property to a use entirely foreign to the purpose for which public funds were expended."

Pointing out that the shortest possible time within which the board could repossess the property under the lease would be approximately three and one-half years, the court continued:

"A board of education possesses no authority so to divest itself for such a long period of the control of public property which has been placed in its keeping. The substantial term of nearly three and one-half years transcends the idea of mere temporary usage of property pending its being subjected to its ultimate and public use."

No Precedent for Decision

Later the opinion concludes that "there has not come to our attention any case from any jurisdiction upholding a divestiture by a school board of the control of the property within its keeping, to such an extent as herein presented."

Furthermore, observing that the reserved right to terminate the lease was based upon two contingencies only (namely, decision by the board to erect a school building or to sell the land) the opinion says: "For no other reason can the board terminate the lease within the twenty-year period. Though it might become highly desirable that the said ground be used by the board as a recreation park and athletic field for school children or for some other purpose not involving the erection of a building, the board could not, for such

¹*Madachy v. Huntington Horse Show Association*, (W. Va.), 192 S.E. 128 (1937).

purpose, and for that reason, terminate the contract. The mere statement of this proposition is its sufficient condemnation."

The foregoing quotation is significant as a judicial cognizance, on the court's own initiative, that the function of a board of education may well embrace the provision of outdoor recreational facilities unconnected with any school building.

Although the lease provided for use of the tract by the school board when not in use by the lessee, the court observed: "The extent of the time of the lessee's exclusive use is entirely within its judgment. If there be any spare time the board of education may have the use of the property, for limited purposes, for school children." The assertion at the trial that as a matter of fact the lessee's use of the property would be for only about one week each year was recognized as possibly involving a bona fide oral understanding, but "the legal rights of the parties must be governed by the contract which they solemnly reduced to writing."

Provides Medical Inspection

Concerning the extent of the board's power to provide for the health of school children, it was shown that under the West Virginia code of 1931, a board of education is authorized to provide proper medical and dental inspection for all pupils attending the public schools, and also to employ school nurses and to take other action necessary to protect the pupils from infectious diseases. This authorization, said the court, cannot be enlarged at the election of the board; and it does not cover any provisions for the medical treatment of pupils, which is quite different from medical inspection.

On the subject of medical treatment, the court cited an earlier case wherein it had recently held that: "A board of education has no authority to pay for medical services rendered a pupil who has been injured or has become ill while engaged in school activities except for first aid attention rendered in emergency situations." In this earlier case, the court had declined to compel a county superintendent of schools to countersign an order for the payment of \$380 of public school funds to com-

pensate a physician who, at the request of the board of education, had given ministrations for an extended period of time to a pupil who had been severely burned in an accident at a public school. Expenditure of school funds for emergency first aid is approved by the court, but expenditures for additional medical services are not authorized.²

The decision in the present case, however, is based primarily on the terms of the lease, in which it is held that the board of education exceeded its authority, for the following reasons: "(1) the period within which the board may demand the return of full control and dominion over the property of which it is the lawful custodian, is of unreasonable duration and is incompatible with the public weal; (2) the contingencies on which the board may demand the surrender of the property by the lessee are unjustifiably narrow and circumscribed; (3) the reservation of right of user of the property is inconsequential, being without assurance as to the extent of time during which the school children, at the board's behest, may enjoy the property."

Although the decision strikes down a cooperative enterprise between the public schools and a benevolent nonschool organization, it must not be supposed that it necessarily frowns upon all cooperative undertakings of this type. The opinion is clearly based upon certain objectionable features of the lease, any of which might conceivably be modified in such a way as to meet the approval of the court. It is not beyond the bounds of possibility that the same parties might successfully engage lawfully in some joint endeavor similar to the one here contemplated.

Effective coordination of the efforts of the public schools and those of nonschool agencies seems certain to become of increasing importance. Expansion of the legal authority of boards of education in this respect is chiefly within the province of the legislatures rather than of the courts, but in any event merits careful thought by teachers, school administrators and board members.

²Jarrett v. Goodall, 113 W. Va. 478, 168 S.E. 763 (1933).

Radio as

RADIO in the classroom may or may not be an efficient tool in teaching. All educational devices ought to be judged in the light of criteria designed for the elimination of faulty tools of instruction. In the process of such a consideration we would face several phases of educational organization.

Education conforms, in general, to six phases: (1) the aims, (2) the psychology, (3) the measurement, (4) the materials or curriculums, (5) the methods and (6) the administration. Each phase presents a set of requirements that an educational device must meet—failing seriously in any one makes it a device of doubtful utility. Can the radio meet the requirements?

A consideration of various philosophies indicates that the improvement of conduct is probably the general aim of education. Individual improvement of conduct brings adjustment to the institutions of society and is to be achieved most effectively through the use of basic mental processes.

An Adequate Teaching Aid

A technique of problem solving is important; its steps are well known. The modern educational broadcast is capable of assisting the individual in raising the problems, providing the conditions and even suggesting solutions. The capable pupil will require only the fact gathering and disseminating function of the radio; being able to raise his own problems, and with authentic radio information, carry out the process to its logical conclusion.

Radio assumes a place of excellence in assisting the pupil to acquire knowledge. The ability to acquire knowledge rises from the stimulus-response nature of the individual. Radio's great motivating influence in all the subjects lends a greater significance to what the textbook and the classroom have to offer, and brings new information directly to the learner.

a Teaching Tool

BOYD F. BALDWIN

Six Suggestions on Classroom Radio

1. Universal radio education would mean that the schools of no time belt need suffer schedule inconvenience. There are a number of feasible ways in which this might be handled if all factors were brought to bear on the problem.
2. Federal and state authority should participate in the direction of radio to ensure adequate and educationally sound radio curriculums for all classrooms of America.
3. There should be, in each state, one or more powerful nonprofit, state owned broadcast stations available to a centralized state educational agency.
4. State owned broadcast stations should be related, in some way, to national networks, so that features of unusual merit might be scheduled for classroom use.
5. Every school system should equip each room for radio and sound reception. Radio's utility is six times its cost.
6. The use of radio curriculums and instruction should be brought under a wise and systematic supervision.

The acquisition of skills will be facilitated to a small degree only by radio. It is probable that most skills thus acquired are by-products. Walter Damrosch has found that he can develop the skill of boys and girls to recognize tone qualities and range of various orchestral instruments to a remarkable degree, and today we witness the use of national networks to teach band and orchestral instruments. A new national skill in uniformity of spoken English is sweeping the country.

Culmination of society's program for the individual depends upon the pupil's desire to respond. Development of social competence may be effectively promoted by radio since its learning stimuli are subject to complete control. Presentation of stimuli is all that a teaching agency can do; response rests with the pupil. Ultimately the most effective devices for stimuli presentation will be employed by the school.

Radio is essentially a method of stimuli provision. If we know the *modus operandi* of the stimulus-response situation, we should know the kind of stimuli required to produce desirable learning patterns. Psychology thus becomes a means of controlling response patterns through the control of stimuli propagation.

The control of stimuli propagation is the problem of the educator, and fortunately, the radio is adaptable to almost perfect control.

Since radio is strictly an audio device it is of importance to know that much learning is done through the auditory route. Paul T. Rankin found that of all time spent by an individual learning through communicative situations, he spends 42 per cent in listening. Compare this with 32 per cent in talking, 11 per cent in writing and 15 per cent in reading.

While listening is indeed important, should it be determined that the auditory route is vastly inferior to the visual, there could be no place for radio instruction in the classroom. Most studies of this matter have concluded, however, that neither route exhibits any marked degree of superiority, when measured over the same ground.

The radio learning situation is inferior to the teacher-pupil situation. Measurement has developed appreciable ratios in favor of the talented teacher in face-to-face relation with his class. All the radio can do for the average classroom is to increase interest by the addition of variety and supplementary information. The average teacher will grasp at the op-

portunity to have such an assistant.

Radio curriculums may be fashioned around the principles of learning. The radio definitely creates interest in most subject matter fields. The Ohio School of the Air claims an attention factor of 86 per cent in its radio classes. How does this compare with attention in the ordinary classroom? Exercise is obviously difficult to provide by radio alone, therefore, radio lessons, like others, will require review. The pleasant effects following radio instruction will quite generally assist in the development of the pupils' desire for further experience.

A majority of subjects may be taught effectively by radio. This study finds subjects taught by radio to rank in the following order as to effectiveness: current events, geography, nature study, social studies, music, health, literature, sciences, mathematics and foreign languages. Subjects taught least effectively by broadcast, however, often stimulate pupils to worthwhile activities in that field.

Radio Equals Other Devices

We have not found the radio to be particularly superior to other instructional devices. In 1937 we must say that it probably just holds its own with the best teaching tools when objectively measured. Its contribution will be supplementary to devices now in use. The radio is a means of transplanting life situations within the walls of the classroom and in this respect excels some other devices.

As an educative device and as an integral part of the educative system, the radio must have well chosen and well organized materials for broadcast. The radio educator must work with the general educator to assure proper selection and presentation of radio curriculums. Since first the radio must have functional curriculums, I would recommend a national commission of philosophers for the determination and selection of educative culture, a national commission of psychologists for its or-

ganization, and regional commissions for its application.

Never in modern times has there been a complete agreement on the constitution of culture. Culture still remains a conglomerate of average belief. Therefore, we are not likely to find a new educational force like radio bending its back to the educational ideal. While it can be seriously charged that neither private nor public broadcasting has sought to prepare adequate classroom radio instruction, the broadcaster can support the claim that education has not universally responded to such programs as have been made available. There is a mutual obligation here that cannot be overlooked.

The use of radio may be classed as a classroom method. When we have our subject matter at hand it may be offered to the pupil through many mediums. The medium is the method. A blanket method is not effective because it does not present stimuli in the variety of mediums required by individual differences. Here the radio can assist, by bringing that variety to the classroom which augments the experience of the average instructor and gets to the physiologic seat of learning in new and effective ways.

In studying classroom methods and radio, thirty-five common methods were ranked, giving first rank to projects, individual methods of study; second rank, student evaluation of materials, oral reports, problems, individual instruction; third rank, radio; fourth rank, examinations, visual methods and written work.

Educational administration functions through the provision of those physical and spiritual factors constituting *educative* environment. Such provision in the field of radio suggests a series of problems.

Prominent among these problems is whether or not radio curriculums can ever be supplied on a dependable basis. This problem will not be solved until control of broadcasting is shared with those who seek to propagate culture. The major responsibility for radio curriculums is now assumed by national networks in collaboration with advisory committees. The networks, being organized for profit, are hardly in a tenable posi-

tion to render dependable educational service on a universal scale.

Universal radio instruction more likely will be achieved through public subsidy. Radio is a phase of instruction and the cost should be borne by the regular sources of support for public education. Private broadcasting hardly can be expected to bear it.

At present there is difficulty in correlating school and radio schedules. There should be little real difficulty in adjusting grade school schedules to radio. High school programs may be adapted if information is obtained in advance of schedule making. The crying need is for broadcast regularity and advance information. The United States, with four time belts, is bound to find one or more time belts suffering inconvenience unless two broadcasts are made of each classroom program. The recording device, though costly, might easily solve schedule conflicts.

The practical sound system for the average school probably will be a combination of radio, phonograph turntable and microphone with a speaker in each room. Besides reception of radio instruction, auxiliary

uses include local broadcasting, record playing, announcements, stage microphones for voice reenforcement and sound picture booth connections. Many schools are now adding a recording device which has the advantage of "catching" radio programs for future classroom use. A sound system will increase the total cost of building and equipment one-half of 1 per cent. In radio equipped schools, the device is used for teaching about 3 per cent of instruction time. This establishes a ratio of usefulness to cost of 6 to 1.

The vast majority of teachers are not prepared to use radio with maximal effectiveness. Until classroom training in radio becomes more general, radio instruction will be enhanced by direct supervision of a trained supervisor. The radio supervisor should be both an expert in classroom procedure and a sound system technician. He should obtain and distribute schedule information to the classroom teacher; his duty is the bringing of outside personalities and events to the walls of the classroom. The ratio of supervision for radio must be governed by its total contribution to school systems.

Molding Personality

GARRY CLEVELAND MYERS

WHY are we so prone to ignore the personality of the young child? The child in the kindergarten or primary grades has been a person since his birth, a person different from all others. What he is as a person he grew to be at home, before he entered school. Even during his school years new personality patterns are being molded in his home.

Facing every child are conflicts with his parents and other adults who assume responsibility for his conduct and conflicts with other children. How mild and few these conflicts are is a measure of the child's mental health, personality and behavior.

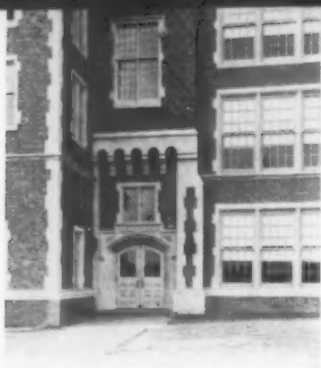
The school affords special opportunities for the child to learn to get along with other children happily.

But the child who has not from his early years at home played freely with those of his own age, who has never learned to get along well on the home playground and who, therefore, is a lonely, timid child will continue all the more to be a lonely, timid child at school, in the presence of so many other active and sociable children.

What we are prone to overlook is that the child's social fears and anxieties at school and his dread of ridicule have more to do in impairing his learning progress than anything else, as a rule. How well he can speak, how well he can concentrate, how well he can study at school depend largely on the degree of emotional comfortableness he enjoys in the classroom and on the school playground.



THE SCHOOL PLANT



North entrance



East entrance

SCHOOL buildings that adequately meet present needs at a price that establishes for the school board a reputation for canny spending and yet impose no handicaps on future expansions are within the reach of all. Their realization, however, requires hard-headed thinking and vision, plus teamwork between board, faculty and architect.

By illustration let's consider the municipality of Teaneck, N. J. From the top of its tallest apartment house can be seen the mammoth towers that form New York's horizon. They are but four miles away as the crow flies and twelve miles by train.

With the nightly exodus from these skyscrapers, thousands come home to New Jersey. As New York has grown the suburban frontier has pushed relentlessly outward. Inevitably Teaneck has grown in twenty-five years from a quiet farming country to a suburban community of 22,000.

For years its youngsters went off to high school in neighboring communities. The town grew rapidly and, in 1929, Teaneck erected a \$650,000 high school in the geographical center of the community.

Teaneck Expands

The George Washington Bridge spanning the Hudson, which made New Jersey more accessible to New York, was being completed at the time. As fast as its growth had been, Teaneck realized what ultimately would happen—that with the acceleration of growth the bridge would provide, the town quickly would outgrow the high school.

The high school building, therefore, was planned with an eye to the future. Structurally it was designed to make erection of an addition or several additions possible with a minimum of change in the original unit. The boiler room, for example, was made of ample size for additional boilers. Walls were so constructed that additional stories could be erected. Blind openings in the masonry were provided for extending connecting corridors and installation of additional boilers. The auditorium was built to permit enlarging the seating capacity without disturbing the structural work.

This was done without increasing the cost of the building. Teaneck

built economically, spending a dollar with the hope of saving two. When the time came to expand the high school facilities to accommodate both junior and senior high school pupils its foresight was rewarded.

Teaneck invested \$1,360,000 to provide accommodations for approximately 2,900 pupils in the largest combined junior and senior high school in New Jersey. It got its money's worth. The per pupil cost of the \$635,000 addition completed last fall was \$345.

This beautiful educational plant embodies the architect's conception that the modern school building, like a home, should have a definite personality. The severe and sometimes barren appearance so common in schools of the past is singularly absent. Beauty has been achieved, not through extravagant expenditure, but by a discriminating choice of material and use of colors devoid of garishness.

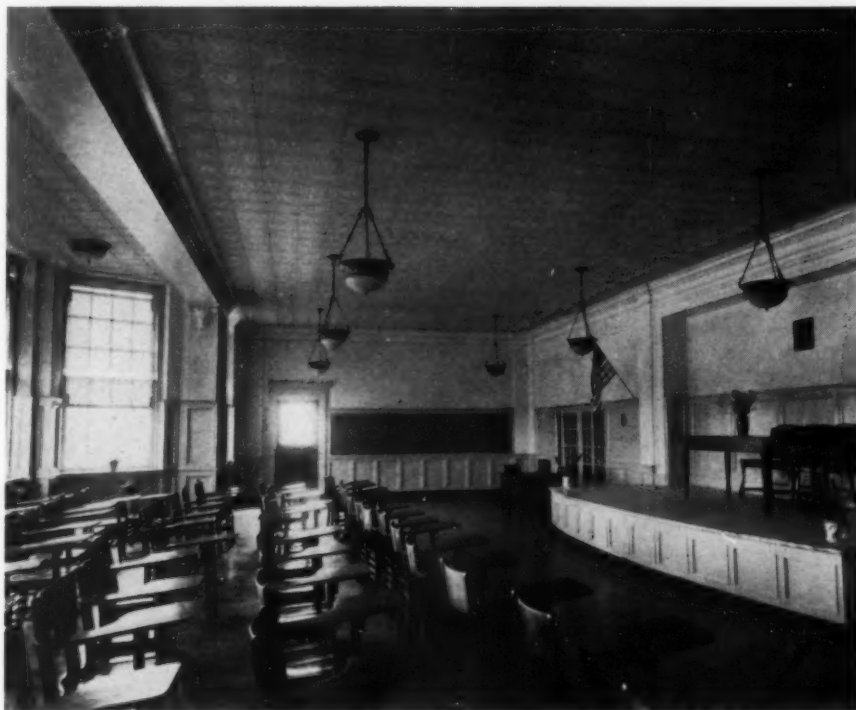
Later it will be shown what Teaneck received for its money, but the first question that naturally arises is:



Teaneck High School has a handsome, sound insulated music room. It is professionally arranged in a semicircle, with steppings at different levels.

Easily

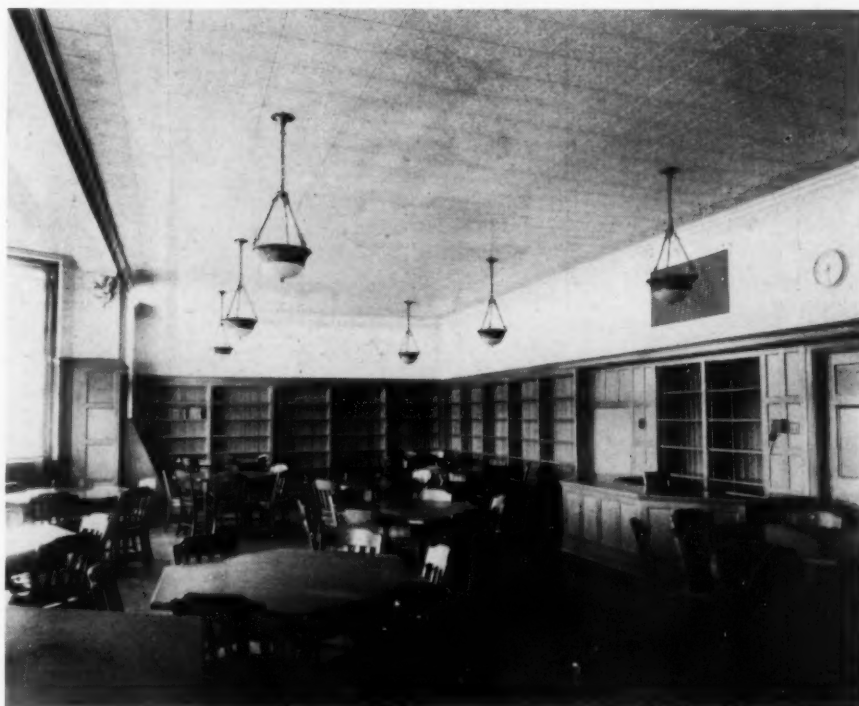
RALPH E. HACKER



How can the low cost be explained? There are seven major reasons: (1) careful planning to eliminate waste space; (2) extensive knowledge of the functions and requirements of special departments, such as science, shop, home economics and cafeterias, and able planning to obtain high pupil capacity and maximum utilization of the floor space allotted to each; (3) planning of departments for multiple use, such as the cafeterias, which become study halls during periods other than mealtime; (4) planning of rooms and constructions on various floors to eliminate complicated and expensive structural conditions; (5) handling of the design to obtain a building of high architectural merit with ornamental work serving structurally as well; (6) careful selection of materials to secure low maintenance, attractiveness and minimum cost without sacrificing quality, and (7) provision in the first unit for increased sizes or additional piping or equipment required for future extensions.

Among its many features are the two gymnasiums, which by the touch of a button become one, and the two

Two other special rooms are the oral English room (above) and the junior high school library (below). The oral English room has access to the outside and may be used for community affairs and theatricals.



cafeterias, which by throwing a switch, become four study halls.

The new junior high school wing is three stories in height on the west side and four stories on the east end. The additional story on the east end provides large storage rooms for a central supply unit where supplies are received and from which they are distributed to the entire school system. A large bicycle room capable of housing several hundred bicycles, an airplane shop, a gun room and a target range also are provided.

Safety provisions have received special attention. Twenty-three exterior doors provide entrances and exits.

The health education department consisting of the gymnasiums, locker rooms, shower rooms, drying rooms, toilets, bleacher storage, apparatus rooms, instructor's offices and girls' rest room is a compact and well planned unit.

Gymnasium walls are treated with impervious material and the ceiling with acoustical tile, eliminating reverberations and noise. The walls of the locker and shower rooms are tiled, and these rooms are well ventilated with both supply and exhaust systems. Progressive lane showers, thermostatically controlled, are an innovation.

A large general shop, including facilities for electrical work, metal work, forge, molding, lathe work,

finishing room, mechanical drawing room, shop locker and wash rooms, instructor's office and storerooms for finished and unfinished articles, is provided on the ground floor where materials may be easily received. The ceilings of the shop and accessory rooms are treated with acoustical tile and have a sprinkler system.

A medical unit contains a waiting room, nurse's room, doctor's office and emergency rooms for boys and girls, each room with its own toilet facilities.

Publication offices have been provided for the school papers, with separate offices for the junior high school paper, the senior high school paper and the high school annual.

On the ground floor level, with access directly to the exterior, is a large oral English room, which may be used independently of the rest of the building by community or school organizations after school hours. This room has a small stage, with offices behind the stage. It can be heated independently, as can other units in

the building such as the gymnasium and offices. Sectional heating of classrooms is also provided. The oral English room is beautifully, yet economically, treated with a decorated acoustical tile ceiling and paneling.

The first floor is given over almost entirely to classrooms. These rooms are so planned and equipped as to be most useful for their particular subjects. The library for the junior high school is also located on this floor. It has shelving on three sides and a wainscoting on the exterior walls, stained a rich golden brown. The tinted plaster and decorated acoustical tile ceiling give not only the proper atmosphere to those using the room but assist in eliminating disturbing sounds. From beside and

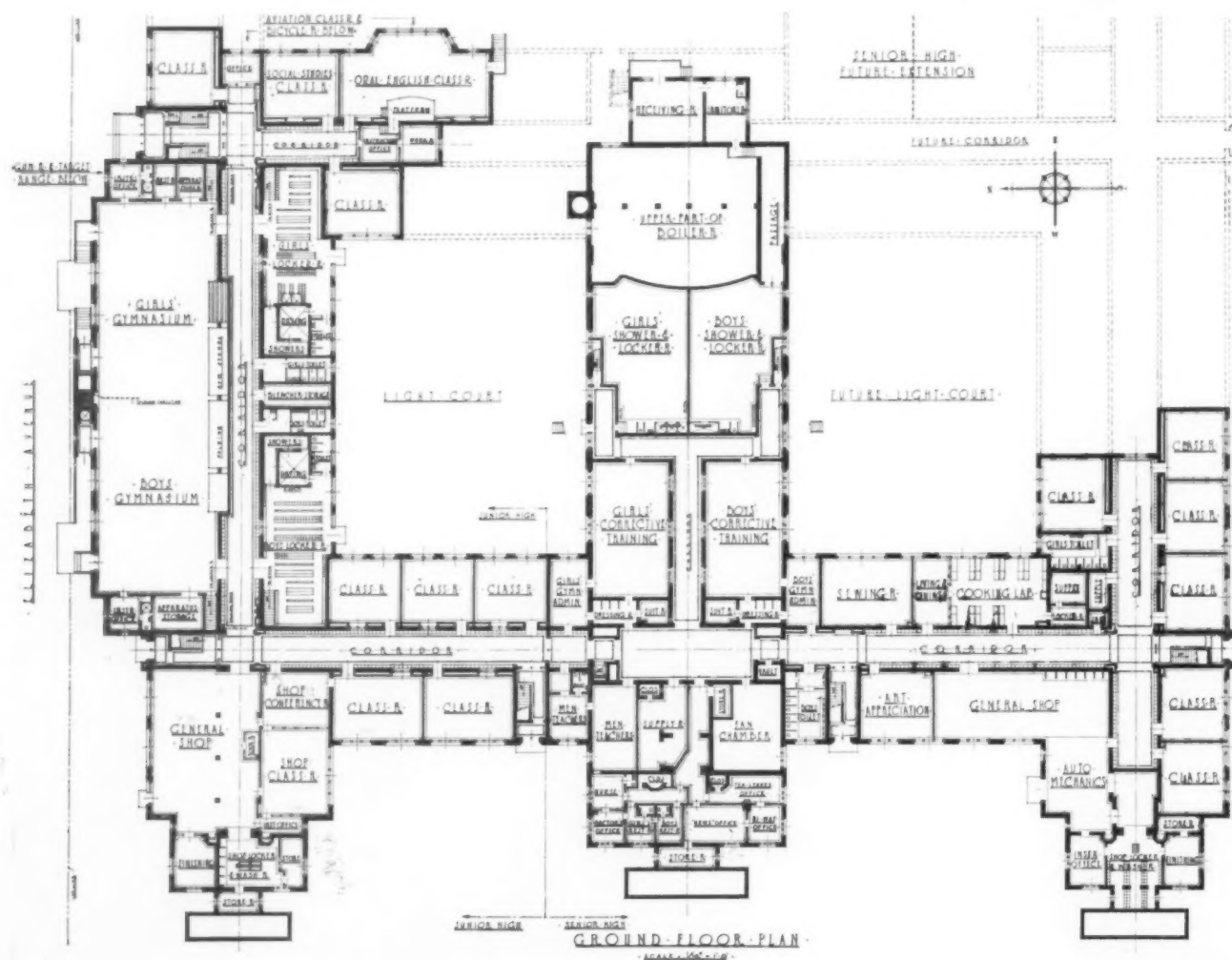
behind the paneled charge counter, doors lead into a librarian's work room and stack room.

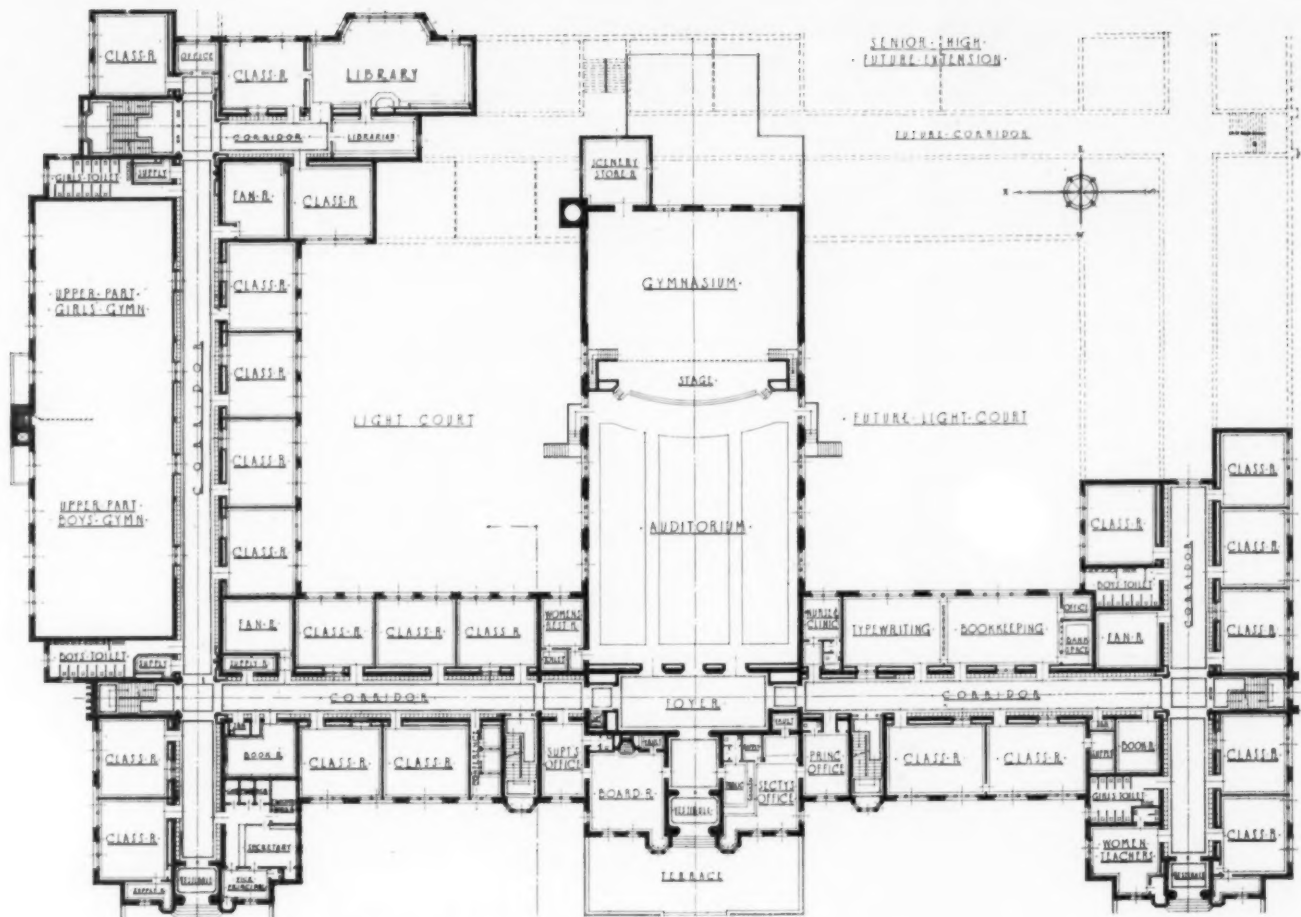
The vice principal's office is located at the front entrance adjacent to the northwest stairhall. A secretary's office, waiting room, teachers' work room and conference rooms are provided in conjunction with the office.

The special rooms on the second floor consist of two large general science rooms, art room and work room in conjunction therewith, cooking room, living and dining room, home economics classroom, sewing room, music room, two cafeterias, faculty dining room, cafeteria service sections and kitchens. In addition, classrooms are provided on this floor.

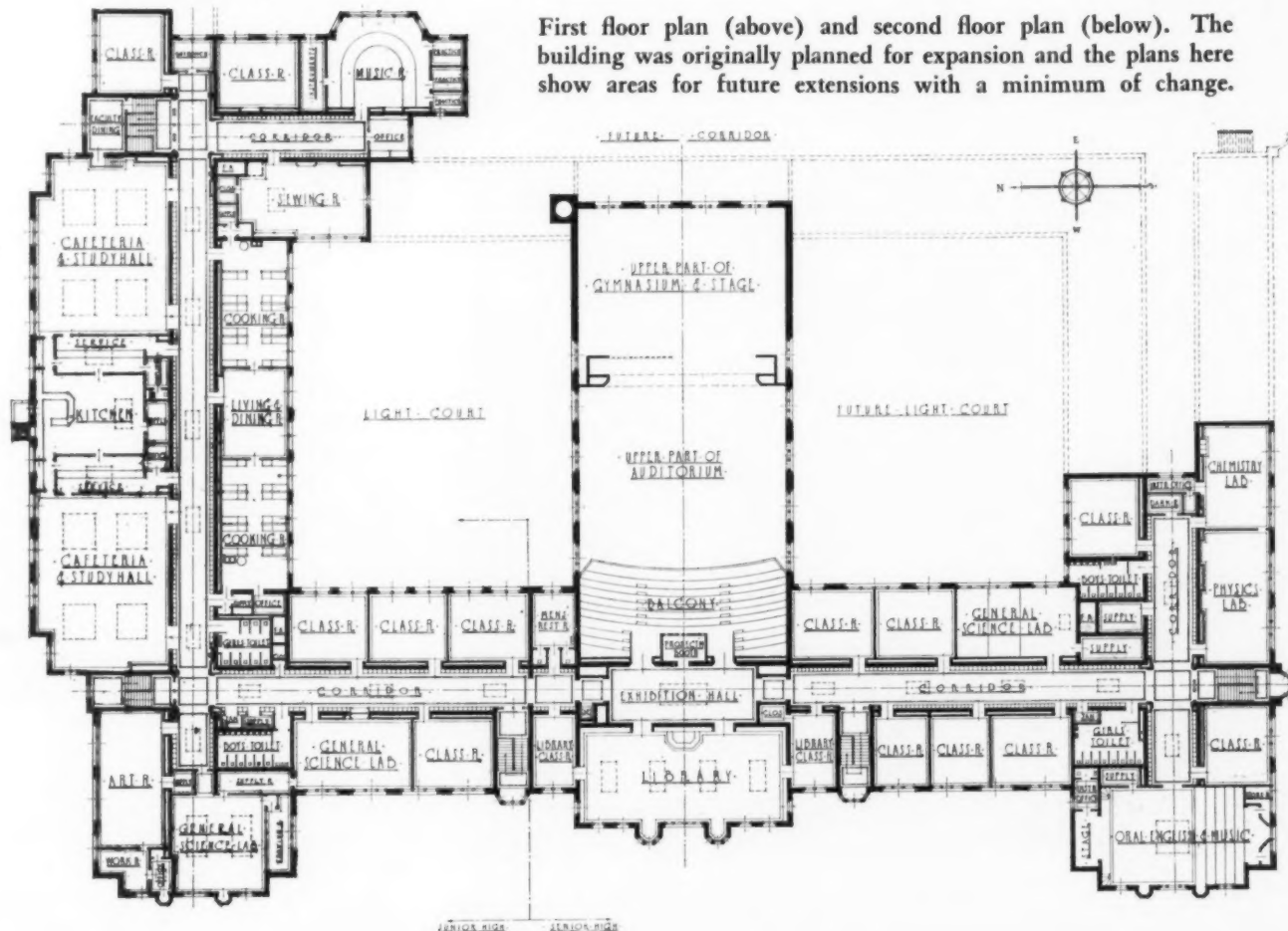
The music room, designed primarily for band, orchestra and choral work, is arranged in semicircular form with steppings at different levels. This room and the four practice rooms adjoining are all sound insulated. The band instrument room is provided with cases and

The enlarged building, designed by Hacker and Hacker, is so arranged that the gymnasium, offices and oral English room can be heated separately and used in the evenings. Classrooms are heated in groups.





First floor plan (above) and second floor plan (below). The building was originally planned for expansion and the plans here show areas for future extensions with a minimum of change.



shelving for various types of instruments. A cabinet for band uniforms and cabinets for music are provided in conjunction with the instructor's office.

The cooking room contains eight unit alcoves equipped with metal cabinets, monel sinks and the most improved type of modern ranges. A large supply room and broom closet adjoin this room. Laundry trays, electric washing machine and electric refrigerator form part of the equipment.

From the cooking room a door leads into the living and dining room. This room is an inspiration to the girls who study homemaking, decorating and social customs. Above the linoleum type of wainscoting is a charming colonial wallpaper. Two built-in china closets, designed in keeping with the room, provide for dishes and add to the attractive decorative scheme employed there.

The building is completely equipped with intercommunicating telephones, fire alarms, public address system and radio loud-speakers in each room.

During construction it was necessary to overcome many obstacles caused by a severe winter, floods that delayed transportation of material and submerged a mill to a depth of

10 feet, ruining or washing away woodwork prepared for this building. In spite of the adverse condi-

tions the school was completed within the contract time and was occupied at the opening of the fall term.

Safety Before Sorrow

INSTANCES in which safety measures have been neglected in schools are forcibly cited in a recent issue of the bulletin issued by the Iowa State Department of Public Instruction.

In many manual training shops table saws are being operated without guards. In some cases guards are supplied but have been taken off by the instructors.

It also has been noted that grinders are being operated without shields or without the operator wearing goggles. Small particles of carborundum or emery or fragments of steel may fly into the eyes of the operator, causing the loss of sight in one or both eyes.

Many shops permit jointers to be operated without guards. Pupils are allowed to push material through them without the aid of a wooden pusher. None of these dangerous

practices are permitted in industry.

Another hazard that should be carefully checked by school administrators and department heads is the existence of loose and uncovered electric wiring. Many fires are started as a result, and occasionally someone receives a severe electric shock or burn. Too often someone who knows nothing of the wiring trade or of the code of the Underwriters' Laboratories attempts to do wiring, the Iowa bulletin points out. Only a licensed or experienced electrician should be permitted to make any installations or changes in wiring in a school building.

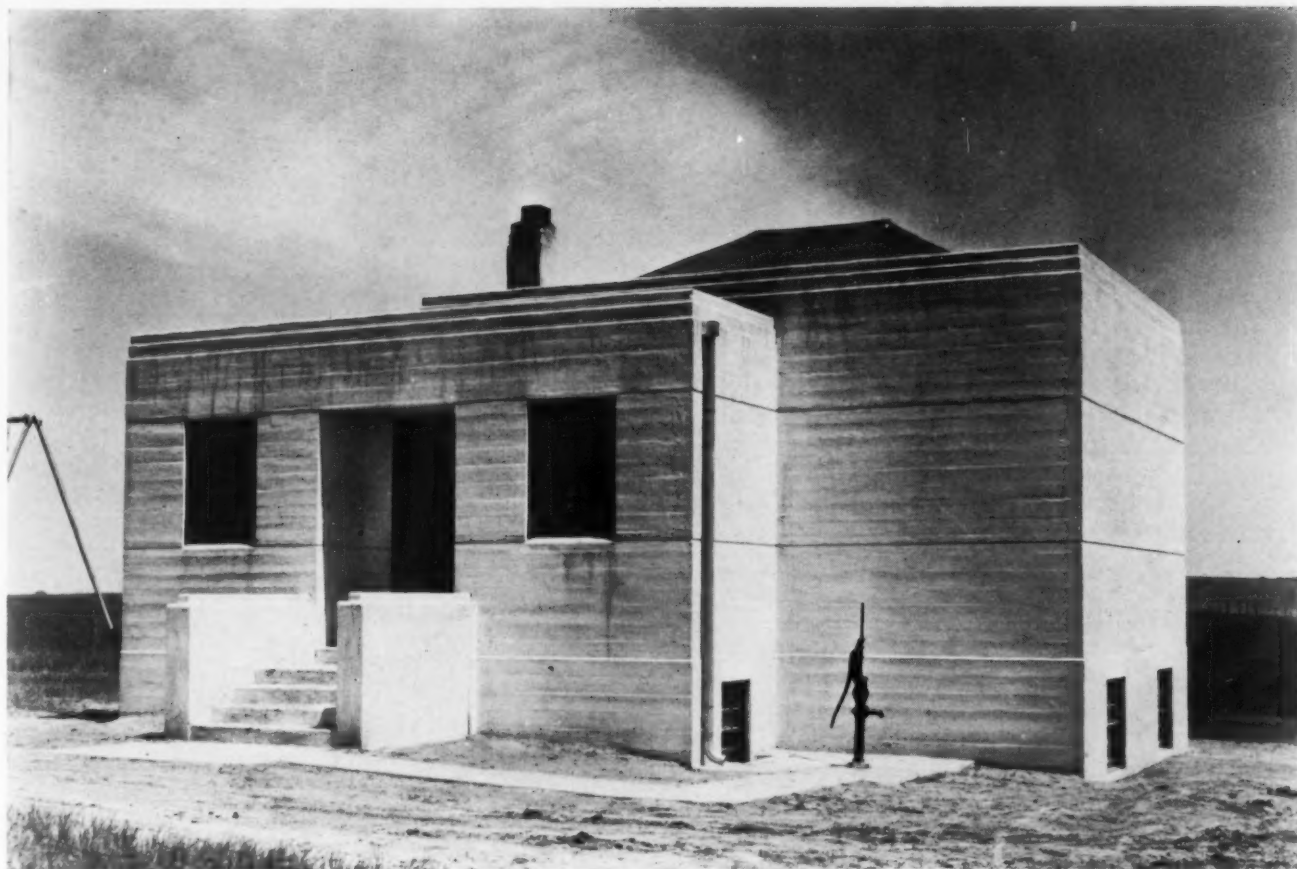
The blow-off valve on steam boilers is another item in school safety cited in the bulletin. Most school heating plants are of the low-pressure type and the safety valve is set to blow off at from 5 to 12 pounds' pressure. This valve should be checked occasionally to see that it is not stuck, and at least every four or five weeks the custodian should run the pressure up in the boiler to the point at which it blows off. Steam boilers have terrific possibilities for danger if they are not handled intelligently.

A new Iowa motor vehicle law, described in the same bulletin, provides not only that school busses must display the sign, "School Bus," but also that the sign must be removed or covered when the vehicle is not in use as a school bus. Careful observance of this law is important if the motor traveling public is to be required to stop before passing a vehicle standing at the roadside and displaying such a sign.

Motor school busses designed to carry eight or more passengers are classed as motor trucks in Iowa. For that reason busses must be lighted in the manner required of motor trucks, according to the length and width of such vehicle, as provided by law.



Two gymnasiums by the touch of a button become one. Walls are treated with impervious material and the ceiling covered with acoustical tile.



It Cost \$4,931

C. L. McKELLIPS

DURING the winter of 1935, the rural school in District No. 78, near Fairbury, Jefferson County, Neb., was totally destroyed by fire. Outside the county this was not particularly important, since every winter at least one rural school burns.

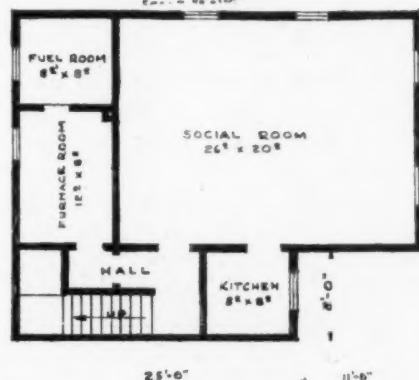
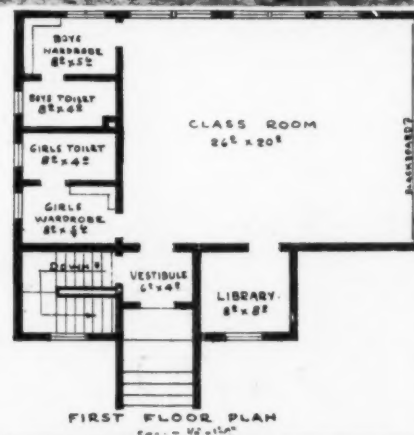
Locally, however, the fire meant a great deal. It deprived the children of their only school facilities. It brought to each parent the reminder that the old building was a hazard that might, under other circumstances, have cost the lives of a score of children. The burning of old "78" was the start of an entirely new trend of thought about school building in this outland community.

Almost before the excitement of the fire had died down, the local board of education was visited by groups throughout the district who

wished to know what plans were considered for future construction and to urge, emphatically, that every possible provision be made for a fire-proof structure. The board stated that before the fire occurred a proposal to replace the old building with a structure of masonry had been discussed. But those plans, it was learned, did not contemplate a building in which floors as well as the walls would be built of firesafe materials.

Before making new plans, it was decided that a study of modern rural school construction should be made to determine the most economical form of construction that could be built assuring maximum protection against fire.

Tentative plans complied in all respects with requirements of the state



In this rural district in Nebraska, the parents were determined that there would be no duplication of the fire that destroyed the original frame school.

board of education for lighting, floor area and ventilation. One design specified concrete masonry walls with conventional roof; the other, a structure designed on simple, modern lines with reinforced concrete walls and a flat roof. Both elevations were designed over the same floor plan which provided for classroom, library, cloakroom and toilet space on the first floor, and community room and furnace room in the basement.

Modern style was finally selected with reinforced concrete walls and a firesafe concrete floor.

Minor changes were made in exterior details, but the general floor plan was retained. The revised plan

accommodate twenty-five pupils according to scientific arrangement as to cubic ft. of air per pupil and correct lighting; a library, 8 by 8 feet, equipped with cupboards for books and supplies; two toilet rooms with chemical-type stools, as are used in rural building, and two cloakrooms. A blackboard runs across the front of the classroom with a bulletin board above. There is also a bulletin board, 5 by 3 feet, at the entrance to the classroom.

The basement includes a furnace room, 12 by 8 feet; an 8 by 8-foot fuel room; a kitchen, also 8 by 8 feet, and a 20 by 26-foot social hall, to be used by the community for social

for the window trim. The ceiling is insulated with 1-inch balsam wool. The floor is of a 4-inch reenforced concrete subfloor with finish wood floor of select grade maple.

The total cost of this rural school building, including all charges, was only \$4,931, which is no more than the cost of a modest family home.

Plant Maintenance and Public Relations

More attention to painting and the condition of school grounds leads to better public relations. As pupils and school employees prefer to spend their time in a more attractive environment, their efficiency is bound to be increased by such environment. This observation was made in a building survey report of the schools of Bethlehem, Pa., conducted by the school of education of the University of Pennsylvania.

Each building in the Bethlehem system is carefully inspected each spring by the engineer of buildings and grounds to ascertain repairs to be made during the summer and during the school year. The principal of each school also is requested to suggest repairs which his building requires. From the data of this inspection, a budget for repairs is made up and the repair program for the summer months and for the school year is formulated.

Approximately 85 per cent of all repairs are made by a full-time repair staff consisting of six members who are specialists in such trades as carpentry, plumbing, decorating, electrical work and plastering. All these workmen are under direction of the engineer of buildings and grounds. The remaining 15 per cent of repair work is done through contract or by per diem workmen.

During summer months school janitors, all of whom are on a twelve-month basis, help in painting and other maintenance work when not engaged in performing their regular duties. There has been little attempt to work the janitors in gangs—painting and carpentry, for instance—although further experimentation along this line was recommended in the report made by the University of Pennsylvania schoolmen.



Except for the roof and the ceiling the building is fireproof throughout.

provided accommodations for twenty-five pupils. A concrete beam and slab floor system was submitted, and a modified peaked roof over the main section replaced the complete flat roof.

The project was immediately approved by the WPA and construction started in August, 1936, with a WPA crew that had had little previous experience with concrete work except on bridge and culvert structures. Good progress was made and the building was ready and occupied by the middle of December of that year.

The structure is 29 by 36 feet over all and includes on the first floor an entrance hall and stairs to basement; a classroom, 26 by 20 feet, planned to

gatherings as well as for recreational purposes for the school.

The building is fireproof throughout except for the roof and ceiling. This alternate on the roof and ceiling was taken in order that funds would be sufficient. The roof, however, is of composition shingles, green in color, carrying a Class C fire underwriters' label. The ceiling is covered with metal lath and plaster carrying a one-hour fire-resisting rating.

The exterior walls are concrete, 6 inches thick, furred with 2 by 2's, 24 inches on centers, are insulated with ½-inch laths and are plastered. They are finished with white cement paint. Dark brown stain was used



Lighting the School Stage

FRANCIS M. FALGE

THE important function that lighting plays on the modern stage is recognized by all theater and dramatic experts. Critics often consider it second in importance only to acting. Of all stage properties, light alone shares with the actors the ability to change continuously, to move, to simulate real life.

The amateur, observing what is accomplished with lighting on the professional stage, often assumes that because of a small stage and limited budget these effects are beyond his means. Except for very special effects, this is far from true. All elements that make it possible to control light efficiently and effec-

tively with professional equipment are likewise available to the amateur. Equipment for the professional stage incorporates many heavy-duty characteristics, handling and mounting facilities, and remote control features which are important from a business standpoint but which are not essential to the lighting result.

The accepted fundamental principles of lighting all stages are the same. The endless variations come in the methods of procedure by



Top of page: Scene in silhouette. Floodlights directed at the backdrop are as necessary to the achievement of this effect as are the actors themselves. Above, right: View of a medium sized stage, showing border and footlights.

which the lighting technician or producer obtains effects.

There are broadly two classifications into which small stages fall: (1) the average school, college and little theater stages of moderate size, used at frequent intervals, and (2) the very small stages in churches and small schools, used infrequently.

The completeness with which the lighting can be carried out depends upon the amount of equipment available and the provisions for its proper placement and use. With adequate equipment the shortcomings that result from the necessity of moving equipment about are obviated, and refinements in effects are possible. With most equipments it is equally important that they be placed properly, and it is desirable that permanent brackets and outlets be located so that equipments may readily and conveniently be set up.

There is, of course, no minimum that can be determined with certainty as essential for proper lighting of the stage. To assure good results, however, there are various equipments that may be grouped and placed in the required location.

Flexibility is a most important consideration in the lighting of any

stage; in the case of the small stage it is vital. To provide for all requirements three groupings of equipments are desirable: General lighting takes advantage of efficient equipments to provide high overall illumination values. Highlighting brings out certain small areas; the equipments are inefficient in overall light output but put the right spot of light where it is wanted. Local lighting is an in-between step provided by semi-directive equipments.

Fixed Lighting Equipment

General lighting is provided by relatively fixed equipments such as borderlights and footlights. Borderlights are rows of lighting units suspended above the stage and concealed from view of the audience by borders. A reflector for each lamp is desirable for the following reasons: (1) light which is ordinarily wasted in the flies and on the backs of borders is redirected so as to be useful; (2) by using a parabolic curvature light is redirected into a beam so that an adequate value is provided at head level for the players and drops are evenly illuminated, and (3) considerably higher general values of light are provided, or, conversely, required wattage is reduced.

Reflectors should have diameters of 8 inches or a minimum of 6 inches, the desirable size being dictated by the need to control scallops of light so that they will not be noticeable from the auditorium. Three-color circuits are the accepted rule, which places like colors on 24-inch centers if the reflectors are mounted so as to touch one another.

For small stages, oxidized aluminum finished reflectors are desirable because of the high reflection factor and the diffused beam of light. For greater permanence a patented finish mat aluminum is good, but, of course, costs more. Oxidized aluminum has the further advantage of permitting the use of clear color filters such as gelatin, whereas with the polished reflectors used for higher mounting heights a semi-diffusing color filter is needed.

One hundred-watt or 150-watt lamps for 8-inch reflectors provide adequate illumination. Because of the infrequent operation of the lights, often on dimmers, the usual life characteristics of standard lamps of 1,000 hours are not necessary, and even undesirable since the need is for the greatest light at the least wattage. It is therefore desirable to use 110-volt or even 105-volt lamps on 115-volt circuits because this gives considerably more light than the use of 115-volt or 120-volt lamps.

Kinds of Footlights

Footlights provide general lighting from below and may be of the permanent type or a temporary type that is laid on the floor of the stage closest to the audience. Permanent footlights are of either the open type or the disappearing type; the latter permit, at some additional expense, a smoother apron for lectures.

No great amount of light is needed from footlights if other general lighting is provided for the apron. It is the tendency to overdo poor footlighting that has brought criticism upon it. Properly used, however, it can do much to tone a set, to soften overhead shadows, to provide natural lighting from below as reflected from snow or sand, or to get light beneath large hats.

Footlights need not, and in most cases should not, have directive characteristics, as this increases shadows on the backdrops. Essentially, footlights should project light evenly through a 90° angle from the vertical to the stage floor. It is essential that like-colored units be placed close together, as this minimizes shadows on the backdrop. Reflectors are desirable to redirect light more efficiently and to hold color frames so that standard lamps may be used, but they should



Two types of spotlights. The one above is a new type with a framing device for giving greater control of spot size. The other is a 1,000-watt type with a spread lens useful in shaping the spot to a rectangular area such as a band pit.



allow spacing of units on 4-inch to 5-inch centers. Oxidized aluminum makes an efficient finish. In general, 60-watt lamps are satisfactory.

Regardless of type, footlights should be mounted so that no part projects more than 3 inches above the stage floor; otherwise, the view of the stage floor may be obstructed.

In many cases removable strip lights can be made to serve excellently for footlights. Because of height, however, some type of tubular lamp is desirable. A good result can be had by using two circuits of tubular lamps having end contacts, permitting nearly continuous lines of light, available in six colors—straw, surprise pink, orange, moonlight blue, emerald green and white.

Growing Use of Spotlights

Spotlights are playing an increasingly important part in theater lighting both in the theater auditorium and on the stage. Whereas other equipments provide a permanent foundation of lighting, the spotlights add the final touch of highlight, pure color or color shadows. Their ability to put light where it is needed, their flexibility of control and adjustment, and their simplicity of use make them excellent tools. Spotlights are especially useful for flooding the entire apron of the stage from the balcony rail. For lighting the orchestra pit, for spotting a player from the booth and for special effects, they are dramatic in their effect—a point of light here, a shaft of brilliance there.

The best known spotlights are those of the lens type in which a lens collects the light and concentrates it into a beam. As to efficiency, the larger diameter lenses collect and redirect more of the light into the beam than small lenses. Lenses of from 5 to 6 inches in diameter are recommended for 250-watt to 400-watt spotlights and from 6-inch to 8-inch lenses for higher wattages.

When the lamp is placed at the focal point of a lens, the most concentrated beam of light is produced. For ordinary equipments the focal length of the lens should be approximately twice the diameter, a 6-inch lens having a 12-inch focal length. Many baby spotlights have had too short a housing to permit a lens of

sufficient focal length and the focusing of the lamp, and their use has therefore been limited to that of a modified floodlight rather than a spotlight. Special applications requiring concentrated spots necessitate housings to take the longer focal length lenses.

Since much of the light from spotlights employing lenses does not strike the lens directly, a greater efficiency can be obtained by spherical mirrors which may pick up and redirect from 10 to 50 per cent of the light that would otherwise be lost in the rear of the housing. Mirrors of this kind must be truly spherical and adjusted so that the light is redirected back through the filament to the lens. Since there must be some clearance between the mirror and the bulb, the radius of the mirror should be at least $\frac{1}{4}$ inch larger than the radius of the bulb with which it is to be used. There should be no screw holes in the mirror surface, and in order to prevent ghosts or distortions of the light beam the edges of the reflector must be a flat black. A turned black metal edge is best.

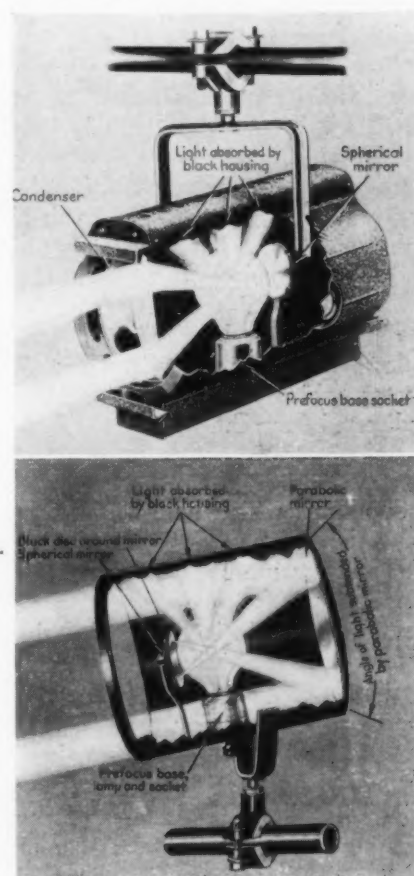
Sharp and Soft-Edged Spots

The adjustment of the mirror so that its center coincides with the filament is difficult especially when the spotlight is hot and, in order to minimize the need for such adjustments, prefocused base lamps are available which ensure the accurate adjustment between the reflector and lamp. These lamps have special bases, such as the mogul prefocus and bipost bases, in which the accurate positioning of the filament with respect to the base is done at the time the lamp is made. The equipment manufacturer likewise aligns and positions the socket and mirror permanently and accurately in the housing. Any lamp, then, that is replaced in the equipment falls automatically into its proper position. The improvement in efficiency and performance is so great that it is well worth while wherever possible to replace the socket carriers on spotlights designed for screw base lamps with those having a prefocused socket and mirror.

The spots from equipments of this kind are usually sharp-edged. When

soft-edged spots are needed to produce a pleasing effect, or when a smooth blend of beams is desired, they may be had by using a frosted or embossed gelatin, possibly with the center oiled for greater transparency. Another method is to stipple the lens at the edges with white paint or to use a stippled glass slide in front of the lens.

Reflector spotlights, as the name implies, are spotlights employing concentrating reflectors rather than lenses. They are usually equipped with some means for eliminating the stray or spilled light that falls outside of the concentrated beam, especially when this stray light would be objectionable or spoil the effect. There are two types of these spotlights: one employs a shallow, long-focus parabolic reflector to give the maximum beam concentration; the other uses a deep, short-focus parabolic reflector. The latter has the maximum light output but with less control of the beam. It is actually a floodlight with the stray light re-



Top: The elements of the reflector spot indicate the directions taken by the light rays. The same is indicated in the diagram of lens spots below.

moved and is more deserving of the title "spot-floodlight."

The first type of reflector spotlight—with the shallow long-focus reflector—is more efficient than the lens spotlight described previously and, for a given wattage, produces considerably more light in the beam. In practice a 25-inch mirrored reflector, with a concentrated filament 2,000-watt lamp, will project a very narrow beam of 4,000,000 or 5,000,000-beam candlepower. Spherical mirrors employed in these equipments are placed in front of the lamp, both to cut out the stray light and to redirect back through the filament and from there to the reflector surface that light which would otherwise be of no use as stray lighting. These spotlights are especially good for long throws. They are also used to provide bright highlights and high illumination values, when the beam does not need to be controlled as accurately as it can be with the lens-type spotlight.

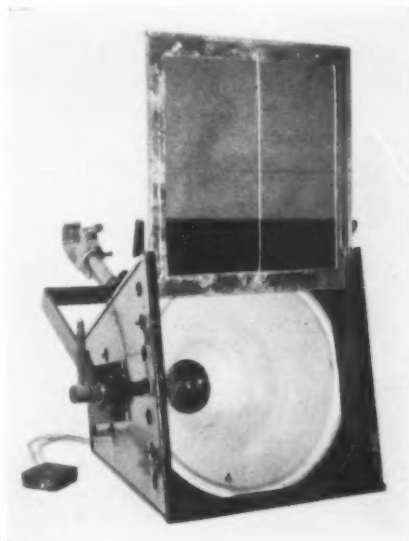
Because of the larger amount of light intercepted by the reflector and redirected, the second type of spot-floodlight is more efficient. Since there is little control of the light into a definite beam, it is useful in cases in which large quantities of light are needed; it is more efficient than baby spots which have a housing too short for accurate focusing. The spilled light coming directly from the lamp is absorbed by circular spill rings placed in the mouth of the reflector which pass only the light redirected from the reflector.

Elliptical Spotlights

Spotlights with elliptical reflectors have the greatest flexibility of control and are more efficient than the lens spotlight for moderate and large size spots. This is because of the greater angle of pick-up of the elliptical reflector. The light from this reflector is concentrated at a secondary focal point and from there through lenses as in the lens spotlight. By changing the size of the opening at the second focal point with a diaphragm, or the shape of the opening with shutters, the beam is changed in size and pattern.

These elliptical spotlights use a prefocus lamp of the bipost type

placed base up in the housing, and approximately at 45° to the vertical. Since the burning positions of these equipments will vary from 10 to 15 degrees downward to 75 degrees downward, the lamp in actual use



Efficient reflectors are desirable for floodlights. This practical unit uses from 300 to 500-watt lamps, has an efficient oxidized aluminum reflector, a yoke hanger of easy adjustment and 12-inch frames for color.

operates at or near the vertical, or being base up, the blackening is collected at the top of the lamp and outside of the reflector. This is most favorable to the use of concentrated biplane filaments, since in a near vertical position the coils are less likely to sag and short against each other. The 1,000-watt or 1,500-watt size is especially useful for long throws; the 250-watt to 500-watt unit is smaller in size and suited for average throws.

When it is necessary to mask the beam from a spotlight so that the light does not spread on to curtains or other parts of the scenery, a mask can be cut to shape by the cut-and-try methods. A simpler method is to use a flipper or blinder which contains slide or hinged wings painted black. These can be adjusted until the correct cut-off is obtained. An iris diaphragm is also useful for decreasing the size of the spot and light output, especially when the spot is singly controlled.

Spread lenses provide an efficient means for spreading the light of a beam into a band. These lenses are

similar to automobile headlight lenses in that they have cylindrical flutes cast or cut into the glass. The deeper the flutes and the smaller the radius of curvature of each, the greater the light coming through will be spread. When lenses with shallow flutes, rated at 2° or 3° spread are used, the spot is smoothed out and soft-edged without an appreciable increase in size. Spread lenses of from 20° to 30° are particularly useful to shape the spot to fit a rectangular area such as band pits or stage aprons.

Floodlights are useful for providing considerable quantities of light from special directions when a closely controlled beam is not necessary and when spilled light is not objectionable. Lighting units for this purpose have been going through a progressive evolution from the older "bunch-lights," which used a number of low-wattage lamps in a metal box, through several successive improvements to their present floodlight form. The present floodlights use well-designed reflectors of oxidized aluminum or of a patented finish mat aluminum and a 500-watt floodlight of proper design will do a much more effective job than the old, cumbersome, heavy 1,000-watt boxlight.

These modern floodlights are equipped with yoke hangers to facilitate adjustments and mounting at all locations. In order that the greater flexibility of color may be obtained, gelatin screens are commonly used.

Building Material Survey

One hundred questionnaires were sent out by *Business Statistics* to architects asking how many schools they designed during 1936, and the different types of construction used. Thirty-two of them replied.

The survey showed that of the construction specified by these men, 45½ per cent had been of masonry, 31½ per cent of reinforced concrete, 11 per cent of steel skeleton and masonry, and 12 per cent of frame.

Projection of these percentages against the F. W. Dodge national total showed that of the 3,527 schools built during 1936, a total of 1,605 were of masonry, 1,111 of reinforced concrete, 388 of steel skeleton and masonry, and 423 of frame.

Design of Window Areas

W. K. HARRISON

and

J. A. FOUILHOUX

LESS than a decade ago it was assumed that an intensity of illumination of three or four foot candles was sufficient for classrooms. However, during the last few years extensive tests and experiments have proved the inadequacy of such lighting. It may be stated with a reasonable degree of objectivity that the intensity of illumination on the working plane should range from 20 to 30 foot candles, 20 foot candles being sufficient for pupils with normal eyes.

During the period when 3 foot candles was recognized as satisfactory illumination, the common practice was to provide window areas that were from 16 to 25 per cent of the floor areas. Less than this area did not provide sufficient light for good vision. It was entirely a matter of subjective judgment. The pupil was able to see his work but no measure of the strain necessary for this seeing was available. Today it is known that, although the eye can adjust itself to seeing under conditions of low intensities, a degree of eyestrain results which, over a period of time, results in impaired vision.

In a typical classroom, 24 feet wide and 12 feet high with a window-to-floor area ratio of 1 to 5, the illumination on the far side of the room is frequently less than 5 foot candles. In order to raise the intensity it is necessary either to use supplementary artificial lighting or to increase the window areas. It is often claimed that the most desirable method is to increase artificial illumination. Those advocating this plan state that artificial light is less expensive and more easily controlled. The expense factor is based on the need for an unobstructed site which allows sky light to enter the windows. The better schools are built on large sites so that with proper building orientation this expense argument may be discarded.

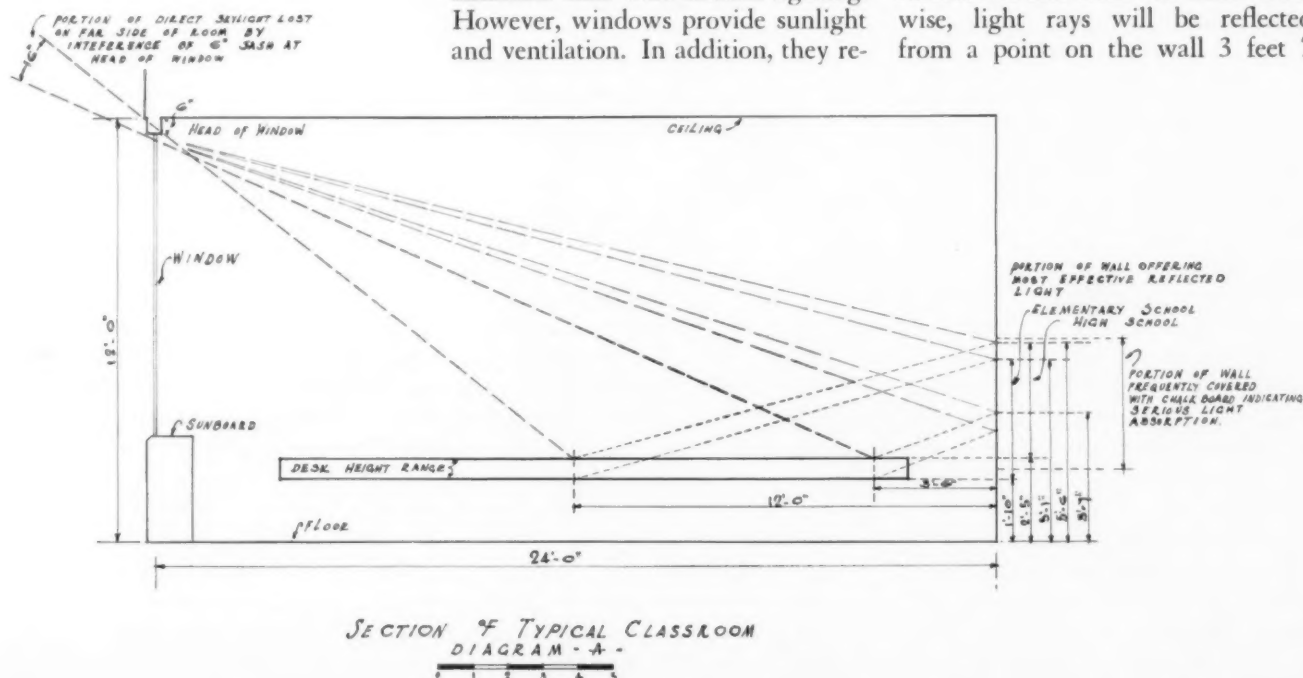
That artificial light is more easily controlled cannot be denied. More uniform intensity, elimination of glare and more even distribution of light are possible with artificial illumination than with natural lighting. However, windows provide sunlight and ventilation. In addition, they re-

lieve the monotony of a walled-in classroom and create a sense of cheerfulness and freedom so essential to growing children.

The analysis presented herewith is an attempt to determine what, if any, limitations restrict the window areas and natural illumination.

Before attempting to increase illumination by enlarging window areas, it will be well to consider the decrease of illumination caused by absorption of light by side wall chalkboards.

Diagram A is a section drawing of a classroom 24 feet wide with windows on the one long side. Generally under such conditions the natural illumination on the right half of the room opposite the windows is insufficient for good visibility. The illumination may be increased by reflecting light from the wall to the working plane or desk surfaces. To illustrate this factor, two points on desk tops have been chosen, one 12 feet and another 3 feet and 6 inches from the wall. Light rays entering the room from the head of the window will be reflected from a point on the wall 5 feet 6 inches above the floor to the point on the desk surfaces 12 feet from the wall. Likewise, light rays will be reflected from a point on the wall 3 feet 7



inches above the floor to a point on the desk surface 3 feet 6 inches from the wall. Two other reflections are shown to indicate the influence in elementary schools.

It is apparent that the wall surface offering the greatest value from the point of view of increasing illumination is between the desk top plane and a horizontal line 5 feet 6 inches above the floor. In many cases this area is covered with chalkboard, the black surface of which absorbs most of the light striking it. The result is a decrease in the intensity of illumination where it is most needed. If 5 foot candles is present at the wall, the chalkboard might readily absorb 90 per cent of the light, reflecting only $\frac{1}{2}$ foot candle. If instead of the chalkboard, a painted wall surface of 60 per cent reflective factor is substituted then 3 foot candles would be reflected. This difference is quite important and should be carefully considered in relation to the need of chalkboards on side walls adjacent to desks.

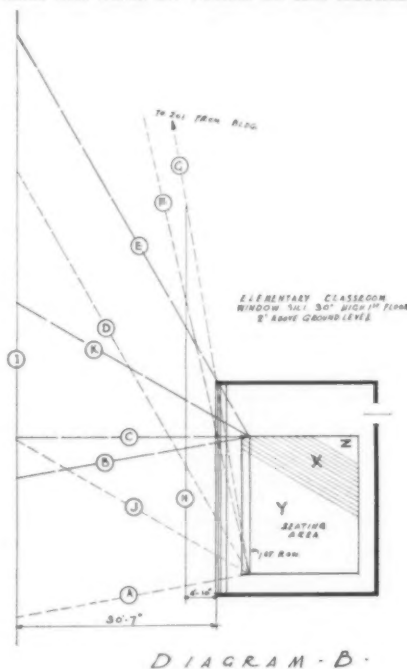
Many states require that the soffit of the window head should not be more than 6 inches below the ceiling line. This is essential in order to assure as much light as possible reaching the side of the room opposite windows. Even this 6-inch space will reduce considerably the amount of sky light entering the room.

In Diagram A an indication of the amount of sky light lost is given. In this case 16° of sky is shut out by a 6-inch sash. The actual amount of illumination lost will of course be dependent upon the brightness of the sky. This particular 16° is in the brightest part of the sky and is therefore of considerable importance. If construction permits, windows should extend to the ceiling line. Preferably not more than 1 or 2 inches of the sash should remain exposed. Shade rollers and Venetian blinds located at the head of the window are undesirable, since they shut out a large amount of sky light. Shades pulling up from the center or bottom of the window are more advantageous.

It is frequently required that no windows should be placed in the exterior wall for a distance of 4 to 8 feet in the front of the room. This area is indicated on Diagram B be-

tween Points 1 and 2. The argument offered in favor of this wall is that it prevents glare in the eyes of the pupils. This argument is based on the assumption that all pupils face forward and look at the front of the room most of the time. Modern teaching methods oppose this type of seating in favor of more flexible desk arrangements and pupil grouping.

Even when all pupils sit in fixed seats and face forward, this wall space benefits only a small number of pupils in the room. It is known that the field of vision of the normal



eye is 100° horizontally to the outside and 60° inward. For both eyes the horizontal field of vision is approximately 200° . The presence of any bright object within this area can be detected. However, the most critical part of the field is 60° to each side of the direct line of vision. In Diagram B the shading lines in the seating area are drawn at an angle of 60° representing the practical limits of the field of vision of pupils within the shaded area when they are facing forward. All pupils in Area Z will have their field of vision protected by the front wall. Therefore, for them the solid wall along the window side is of no benefit. Those seated in the shaded Area X will benefit by the solid side wall, since it eliminates any glaring light within their field of vision. Pupils in Area Y will receive limited benefits from

the solid wall, and a large part of their field of vision still includes objects outside of the window.

From this analysis it will be noted that only a few of the pupils in the room receive benefit from this section of wall. It should also be noted that this wall shuts out a large amount of light from desks in Areas X and Z. Based on this analysis it is apparent that this solid wall is not only unnecessary but a detriment to satisfactory illumination.

A study of state building requirements and the recommendations of experts indicates a rather universal feeling that the window sills should be from 30 to 42 inches in height. The arguments presented in favor of this arrangement include: (1) elimination of indirect glare caused by reflection from ground and surrounding objects; (2) distraction of pupils by people or objects outside of the window, and (3) protection from window breakage. The arguments of those opposing high window sills are primarily based on the desire to permit children to look out of the window and relieve them from the walled-in atmosphere of the classroom.

Diagram C is a section drawing of an elementary school showing classrooms on first and second floors. The first floor is 2 feet above ground level. Window sills 2 feet 6 inches high are shown. The eye level of the pupil is assumed to be 3 feet 2 inches above the floor. The first row of seats is placed 4 feet 6 inches from the windows. The following deductions may be made from this drawing:

1. In the first floor classroom pupils in the first row will not be able to view any objects within the Spaces B and D. If the windows extend to within 8 inches of the floor (no window stool), then pupils will be able to see all objects except those in the Space D.

2. In the second floor classroom pupils in the first row will not be able to view any objects within the Spaces A, B, C or D. If the windows extend to within 8 inches of the floor (no window stool), then pupils will be able to see all objects except those in Spaces B, C and D.

Thus, it may be seen that the space blocked out by the window stool in

the first floor classroom is approximately the same as would be blocked out in the second floor classroom without a window stool. Stating it another way, any glaring objects in Space A would glare in the eyes of first floor pupils, while a window stool on the second floor would protect second floor pupils from this glare. A second floor classroom does not require a sill as high as that required in first floor classroom to render a single source of glare invisible.

It should also be noted that the only pupils affected by this glare are those in the row immediately adjacent to the windows. Turning their desks slightly away from the window would place the glaring light outside of their field of vision.

Diagram B shows the ground area outside of a first floor classroom in which glaring light sources are protected from eyes by the window stool. Assuming that the pupils face forward in the classroom, the following deductions may be made:

1. Line A is the outside limit of the field of vision of the pupil nearest the window in the rear row of seats.

2. Line B is the outside limit of the field of vision of the pupil nearest the window in the front row of seats.

3. Line J is the practical limit of the field of vision of the pupil in the rear row. The line is 60° from the forward line of vision of the pupil.

4. Line K is the practical limit of the field of vision of the pupil in the front row.

5. Line I is the limit of visibility for pupils protected by a window sill, 30 inches high. Line H is the limit of visibility without the window sill but with the spandrel extending 8 inches above the floor level.

6. For the pupil in the rear row nearest the window, the window stool protects him from glaring light sources located within the area bounded by Lines A-H-G-I. Practically the only area of importance is

that bounded by the lines J-H-G-I.

7. For the pupil in the front row nearest the window, the window stool protects him from glaring light sources located within the area bounded by Lines B-H-E-I. Practically the only area of importance is that bounded by Lines K-H-E-I.

8. If the pupils in the outside row turn their desks inward 30° , as previously suggested, the area of glare sources protected by the window stool for the rear pupil is limited to that bounded by Lines D-H-G-I. The pupil in the front of the room will not receive glare from any outside source. If the desks in the rear were turned inward 50° , no glare would enter the pupils' eyes, with or without the window stool. This same condition will exist in the second floor classrooms.

Referring to Diagram C, it is obvious that any source of glare extending higher than the limit of Space B would not be protected by the window stool on the first floor. Likewise, sources of glare extending above the limit of Area A would not be protected by the second floor window stool.

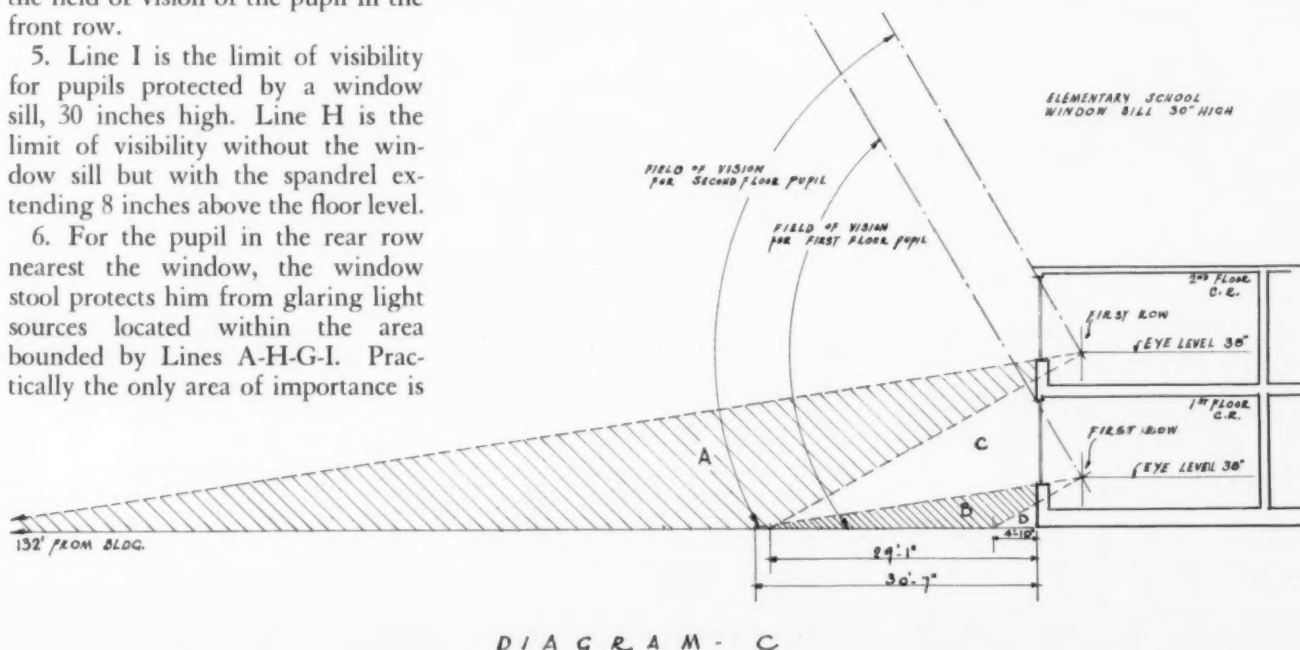
From the point of view of eliminating glaring light reflected from bright surfaces outside the windows, the window stool has limited advantages. This type of glare can better be controlled by turning the seats and desks at an angle to the windows and by proper landscaping of the school grounds. Bright surfaces

such as concrete driveways should be avoided outside of classroom windows. Second floor classrooms receive far greater protection from glare by window stools than does the first floor.

The argument that pupils are readily distracted by people outside the window must be weighed against the desire to allow pupils to look out of the windows for a moment of restful change. Of course, the problem of distraction may be cared for by using diffusing glass. Protection from window breakage may be easily attained by the use of various types of structural glass.

No attempt has been made to point out the many advantages that may be obtained by extending glass areas from floor to ceiling. No general application can be made. However, for primary grades and kindergartens, several educators have expressed desires for classrooms with glass doors opening directly on to terraces. Even in high schools the combination of indoor and adjacent terrace classrooms is frequently desirable.

The elimination of window stools will increase illumination, permit pupils to enjoy the outside view and allow greater flexibility in architectural design. There seems to be little advantage in increasing the width of spandrels merely to eliminate glare. If the spandrel extends above the desk top plane, natural illumination will be decreased.



BETTER PLANT PRACTICES

Check on Lighting

How about a check-up on school lighting? An investigation made last winter in John H. Francis Polytechnic High School, Los Angeles, Calif., revealed all sorts of startling conditions which were quickly rectified. Teachers were notified that if they were interested in having the lighting conditions of their rooms checked they had only to notify J. C. Goodsell, vice principal. The accompanying form was used in

LIGHTING SURVEY			
Room No.	Building		
Use			
Windows face N S E W			
Time of day		Sky (clear) (cloudy)	
Number of pupil stations			
Date			
Position of teacher's desk: near wall (front) (side wall) (.....)			
Position of window shades or curtains: (completely open) (partially open) (completely drawn)			
REPORT OF FOOT CANDLE INTENSITY			
(Daylight alone in first column; daylight plus electric light in second column)			
Desks or tables nearest windows:			
Day	Elec.	Day	Elec.
Front		Middle	
Day	Elec.		
Back			
Midway between wall and windows:			
Day	Elec.	Day	Elec.
Front		Middle	
Day	Elec.		
Back			
Farthest from windows:			
Day	Elec.	Day	Elec.
Front		Middle	
Day	Elec.		
Back			
Teacher's Suggestions:			
Teacher's Signature			
RECOMMENDATIONS (Teachers please do not fill this in)			

conjunction with a sight meter of the photo-electric type reading direct in foot candles.

"Many teachers expressed interest and in some cases performed the study themselves," Mr. Goodsell states. "An ordinary classroom can be checked in less than five minutes' time." He explains the procedure.

"Upon completing the check-up of a room the chart is turned in to the office for study. A copy is made and any recommendations thought advisable are recorded. The survey sheet then may be returned to the teacher to be kept in

the class roll book so that reference may be made to it at any time. Starting conditions are sometimes found and teachers are thus made sight conscious in an interesting and practical way. In some rooms the seating of those whose vision is poor has been changed to great advantage; in other rooms in which tables or drafting desks could be moved a rearrangement has been accomplished all to the betterment and ease of seeing. Sometimes electric lights should be turned on in the daytime, and certainly electricity is cheaper than poor eyesight."

"Stoking" Right

How is that stoker operating? Very likely these few suggestions made by the Engineering Extension Service, Iowa State College, will be useful.

"To obtain best results in the operation of the underfeed stoker the rate of coal feed and air supply should be so adjusted that there is always a layer of green coal several inches in thickness above the top of the retort. It is comparatively easy to secure such a result without frequent adjustment when there is a steady demand for heat.

"Too much air in relation to the amount of coal fed will have the same effect as too thin a fire in a hand-fired furnace. The coal will burn at such a high rate that the fire may actually be in the retort instead of above it. When such a condition occurs the molten ash may run into the tuyères (air inlets) and cut off the air supply.

"Too little air will result in too great an accumulation of fuel and a smoky fire, with excessive soot formation.

"Variations in coal sizes have a pronounced effect on stoker performance. Owing to segregation of sizes during unloading, it is quite possible, if care is not used, to fill the hopper one time with all coarse coal and the next time with all fine. The stoker adjustment will not be right for either of these sizes, if it has been set for an average mixture. Accordingly an effort should be made to keep the mixture in the hopper uniform.

"If a column of coke forms above the retort it is usually due to an accumulation of clinker, which is crowding into the retort and cutting off the air supply. The remedy is to remove the clinker.

"It is quite possible that after long periods of low rate operation of the stoker the furnace will become filled with ash which is not fused. However, it is seldom necessary to remove anything except clinker.

"A heavy, strong clinker is usually an indication that the interval between cleanings is too long. Since the amount of clinker is proportional to the amount of coal burned, it is necessary to clean the fire oftener in cold weather.

"Excessive gas through the hopper is usually due to allowing the fire to burn down into the retort, usually because of too much air; or it may be due to a clinker covering the tuyères."

It Tells the Story

Welcome to "The Home Visitor," a particularly attractive little folder which C. R. Stone, superintendent, Munhall School District in Pennsylvania, has prepared and is distributing at each report card date. Its purpose is to present school facts to the parents. No. 1, which made its initial bow in October, carries a story about the libraries.

"Do you know that the Munhall school libraries are outstanding among the schools outside of Pittsburgh?" this reads. "Visiting schoolmen are loud in their praise of our libraries. In 1923 the first books were added. Now the total of the books numbers 16,124 volumes in the Eleventh Avenue School, and 1,890 in the Woodlawn Avenue School."

On another page is an invitation to parents to attend special assemblies. "The school board has for the last three years provided a series of assembly programs free to the upper grade pupils. To these the parents are welcome."

The third page is given over to American Education Week, and on the fourth and last page appear another library picture and a brief report on "Pictures With Sound." Since 1920 at least, this reads, "the Munhall schools have had motion pictures as a regular feature of the school program weekly. Since 1930 silent pictures have not been produced on 35-mm. film. The emphasis has been on sound. The board has approved the sale of our two large silent machines, and the purchase of two of the latest sound machines for the auditoriums. . . . We ask you to come to the schools at the regular auditorium periods to see and hear the new programs."

Already the next issue is being awaited with interest. By the time the sixth is distributed on June 3, the community should be better acquainted with its modern and progressive school system.

Prelude to Eating

AUBREY B.
GRANTHAM

A HAND-to-mouth existence will concisely define the line of travel followed by most causative agents of children's diseases. The first defense against such germs is apparently achieved through the simple act of washing the hands with warm water and soap before eating. Simple act, did we say, when it must be performed simultaneously by any large group of children at a lunch period? We must recognize that it is far from simple under conditions that now exist in most schools, and we must devise means of introducing some simplicity into this necessary health precaution.

While this problem is receiving careful attention in some of the more advanced schools, a survey indicates that the majority of school buildings are not equipped with washrooms having adequate facilities for group handwashing. A great many have only a limited number of wash basins for general use. Add to the picture those basins having spring closing faucets and cold water only, no towels and no soap, and then try to find anything to encourage habits of cleanliness among a group of hungry school children intent on getting to the lunchroom. Even in school buildings having washrooms with generous equipment for washing, the location of these rooms in relation to the cafeteria is seldom conducive to a regular handwashing before eating. In cases in which washrooms are on a floor above or below the cafeteria, the probability of any great number of children making the double stair trip in the interests of cleanliness reaches the vanishing point, and emphasizes the necessity of installing handwashing facilities adjacent to the cafeteria or lunchroom.

The time element present in all operations of school work, enters seriously into the formation of this health habit without penalizing the children by reducing their lunch period. With this in mind, the location of the handwashing facilities for use



Courtesy, Department of Education, Newton, Mass.

Trough fixtures are supplied with water by means of small spray nozzles on a pipe running the length of the trough, with a control valve at one end.

in connection with the cafeteria must be studied with an emphasis on convenience, adaptability to planning conditions, efficiency of operation of the type of fixtures selected, and the adequacy of the layout to handle large groups. When these points are observed, the actual time spent in handwashing by the majority of any group will run concurrently with the waiting time in the cafeteria line and will not incur any additional reduction of the lunch period.

Convenience should be the keynote of any layout of washing facilities installed to induce habits of cleanliness among children, and a

careful consideration of this point will reduce to the minimum future disciplinary requirements in connection with their use. Washing facilities must do just what the term implies, make the washing operation easy and pleasant if handwashing before eating is to become a voluntary habit on the part of the child. We would again note that the first consideration in the way of convenience is the placing of the washing facilities in the line of approach to the cafeteria, preferably in connection with the entrance to this room. Arrangement for convenience also requires that this line of travel of the

children while using the fixtures shall be in one direction, that the fixtures be set at the correct height for children's use, and that they be equipped with water supply fittings that do not require individual manipulation on the part of the users.

Introduction of convenient hand-washing facilities at the cafeteria entrance, installed solely for use in connection therewith, should not be considered a startling innovation. It need in no way detract from the attractiveness of the cafeteria, if careful consideration is given to its planning. When space is available, the plan may take the form of a vestibule through which each group will enter the cafeteria. In modernizing an existing layout a separate room may not be practicable, and the hand-washing fixtures may have to be located in the cafeteria with a screen dividing the washing portion from the table space. In either case the operation will be the same, and the entrance location has the added advantage of providing convenience for those children who, in these sandwich eating days, wish to cleanse their fingers after eating before returning to their books.

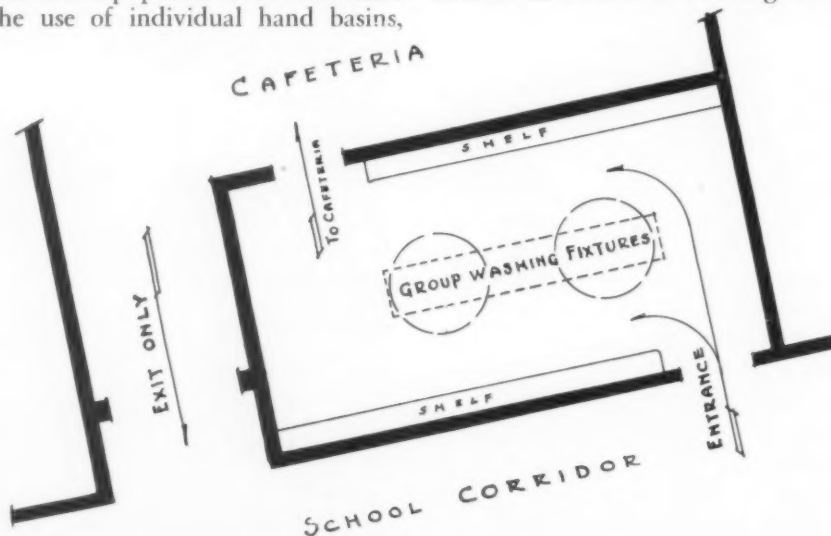
The layout must provide shelves set at a convenient height and location, on which children can deposit books and packages while washing. Mirrors are a cause of congestion, and, if provided, should be located away from the washing fixtures and

out of the line of travel. Whatever form the layout takes to conform to the planning conditions of the existing or projected building, its location should be determined by the factors of convenience and control.

Efficient operation of the type of fixtures selected is of paramount importance when large groups must be accommodated within a limited time. For this kind of installation, we would not advise the use of individual wash basins. Not only would the time required to fill and empty a basin retard the group washing schedule, but the child's natural reluctance thoroughly to cleanse the bowl before leaving it for another's use might partially defeat the object in view. When the necessity to make out with equipment on hand dictates the use of individual hand basins,

the waste stoppers should be removed and small spray nozzles installed in place of the faucets. These nozzles should extend 3 or 4 inches out from the back of the bowl, and the flow of water through them should be controlled from one point in the room by means of a single temperature and flow control valve.

Among the fixtures that are manufactured especially for group washing, there is one convenient type, circular in form, which has water sprays and soap supply mounted over the center. This fixture provides generous elbow room for the users and is designed to be installed away from the wall, thus allowing ample space for circulation. Another and somewhat similar type of fixture is semi-circular in form and is arranged for



Sketch of washroom layout adjoining cafeteria.

One type of fixture is circular in form, and provides genuine elbow room for the users. Water sprays and soap supply are mounted over the center of the bowl.

Courtesy, Department of Education, San Antonio, Tex.

installation against the wall; a shape that may prove advantageous in some layouts. There are also washing fixtures of the trough type that are manufactured in unit lengths complete with water and soap fittings. These may be assembled and connected up in batteries of any required capacity. Fixtures that are manufactured for adult use should be carefully checked as to height when adapted to the requirements of the younger grades.

While any selection of fixtures should give first consideration to those scientifically designed for group washing, a fairly adequate installation for school use can be obtained within the restrictions of a limited budget when stock fittings and fixtures are adapted to this purpose by the local plumber.

One such adaptation is the use of an enameled iron or stainless steel trough, set at a convenient height for the age range of the children, and supplied with water by means of small spray nozzles on a pipe running the full length over the trough and equipped with a valve at one end to control the flow and temperature. Such a fixture should be set away from the wall, allowing sufficient space for use from both sides with a clear passageway behind those using it.

When this type of fixture is in use in schools, a satisfactory means of control has been obtained by placing the operating valve in charge of a class monitor. When so operated, a uniform flow of water at a predetermined temperature can be maintained when the fixture is in use by a class group. The battery type fixture should be equipped with an additional spray nozzle under measured spring valve control for incidental use by individuals when the fixture is not being used for group washing.

Whichever type of fixture is selected to meet the particular requirements of space or budget, it must be provided with an adequate supply of heated water for tempering the washing water at the spray nozzles. This provision of heated water is imperative if the program of group handwashing is to succeed in developing voluntary cleanliness habits. In schools in which there is no pro-

(Continued on page 62.)

FOOD FOR THOUGHT

Speedy Checkers

- Lightning speed has been developed by the cashier and checker in the Roosevelt High School cafeteria, Wyandotte, Mich. This important post is held at successive lunch periods by two women instructors in the mathematics department. In return for their speedy and accurate work they receive their lunches free.

Last year this Wyandotte high school for the first time undertook to supply the food for children outside its own walls, reports Miss R. E. Slater, lunchroom director. Some twenty pupils in the orthopedic room of an elementary school could not go home for lunch, so a school truck was commandeered to take hot lunches to this group from the high school cafeteria kitchen. A rapid gain in weight was recorded for these pupils, so the plan is being continued this year.

Festival Day

- In Pontiac, Mich., Mrs. E. J. Ferris, director of school cafeterias, has a semi-annual Surprise Day or Festival Day. On that occasion, and on that occasion only, "hot dogs" are served in the school lunchroom. The children get very excited over the day, and as no advance notice is given lunchroom attendance is more regular by some pupils who do not wish to miss this festive day. Mrs. Ferris is proud of the fact that from 65 to 70 per cent of the operating expenses of the Pontiac cafeterias appears under the item "Food." Labor expense is from 20 to 25 per cent, and supplies and maintenance make up the remainder.

They Now Drink Milk

- Last year in the large rural consolidated high school of Ashland, Ala., Coca Cola was sold by the senior class. During the year, according to Ruth Parkman, vocational home economics teacher, a number of pupils expressed the desire for a place to keep milk if they brought it from home to supplement their box lunch. At the beginning of this year the home economics class, while studying the health unit, resolved to make a cool, convenient place in which to keep the milk in order to supplant the soft drink sale. They asked each pupil to bring 5 cents a month to buy a daily supply of ice. Now not only are the home economics pupils bringing milk, but little boys in the junior high class, football players and

physical education pupils as well. The pupils in the elementary school have seen their older brothers and sisters bringing milk so they are doing the same thing across town in the elementary building. Mothers have expressed their gratitude for the project since it simplifies the school lunch problem.

Public Relations and Lunch

- District School No. 3, Fairfield Township of Cedar County, Iowa, was designated as a superior rural school recently for its visitation program planned by the parents. Three families of the school district prepare a noon meal for the school, eat with the children and spend the afternoon observing the regular school work. Fathers as well as mothers participate in this program, which is carried on until every patron has visited the school.

Turkey, 15c a Plate

- Annual Turkey Day proved its usual success in the school cafeterias of the New Castle Public Schools, New Castle, Pa. For 15 cents Mrs. Rachel P. Taylor, manager, serves on a dinner plate substantial portions of turkey, mashed potatoes, dressing, cranberry sauce and pickle. Approximately 2,500 took advantage of this opportunity for Thanksgiving dinner. "As you will imagine," says Mrs. Taylor, "it was a big day for all of us."

For Lunchroom Directors

- A booklet issued particularly for school lunchroom directors is "Good Nutrition in Practice," by Mary Hemmersbaugh, lunchroom supervisor, board of education, Cleveland.

Briefly summarized, the book states that "school cafeterias should be non-profit organizations; they should be successful from a business standpoint; a home economist should be in charge; the cafeteria should function in the general educational program, particularly the health program of the school; the cafeteria should be recognized as an essential school activity and should be maintained to further the welfare of the students first, last and always."

A section of file recipes is included, along with special budget menus. The publication is provided without charge to lunchroom managers from the some thirty dairy councils all over the country, or a copy may be obtained for 20 cents from the National Dairy Council, 111 North Canal Street, Chicago.

Prelude to Eating

(Continued from page 61.)

vision for heating water, its introduction may at first appear to be an extravagance, but further consideration will indicate that it should prove to be a practical economy in the matter of both soap and water consumption.

Soap is also an important item in any group washing program, and its convenient distribution must be carefully arranged. The use of other than liquid or powdered soap for group washing introduces difficulties that should be avoided. The principal points to consider are that the dispensing points are of sufficient number to eliminate the necessity of children reaching in front of one another to obtain soap, that the points are at a convenient height for a child's reach, and that the operation of obtaining soap can be performed with one hand. Soap containers should be of glass in order that the contents may be readily inspected, since soap shortage while a group is washing will prove detrimental to the schedule of operation.

Hand drying is almost as important as handwashing, and several methods have been tried for group work. The perfect system has yet to be evolved, but the following methods may be studied in their relation to other governing conditions.

Warm air dryers have been used successfully in some washrooms. They are the only method of drying in which the hands are not in contact with any transmissible substance. However the relatively long time required to dry the hands thoroughly must be taken into consideration in determining the number of units that would be required for large groups operating on a close schedule.

Discardable paper towels, issued to each child by means of a dispenser located at the exit end of the washing fixture appear to meet the requirements of convenience and speed. The towels, however, must be of a type that will actually dry the hands. A metal container for the disposal of used paper towels should be located on the line of travel near the exit.

When the school building has a modern laundry or when a favorable contract can be made with the local

laundry, small individual hand towels of cotton or linen may prove to be most economical and satisfactory.

In many communities the school authorities, fully cognizant that handwashing before eating is a phase of the health program that would be reflected in improved attendance records, still hesitate to attempt its inauguration because of an already restricted operating budget. In some cases this financial hazard may be surmounted and the objective gained by a direct appeal to the parent-teacher association or to some other actively interested group, and the

program presented as a cleanliness health measure worthy of independent support. By such an approach the initial costs of equipment and the provision of an adequate supply of towels and soap may be shouldered by interested members of the community.

Whichever way the desired results are obtained, eventually the necessity of handwashing before entering the school cafeteria will be recognized as a logical health precaution on a par with the accepted requirement that every child take a shower bath before entering the school swimming pool.

They Boost Food Sales

THE manager of the Rayen School cafeteria, Edna Gilbert, has found that the patronage in the cafeteria has increased each year after the holiday season by about 15 per cent. She attributes this partly at least to the special holiday lunches she serves before Thanksgiving and Christmas vacations. These lunches, sold at the regular prices, get some pupils in the cafeteria for the first time, and serve to acquaint them with the quality and reasonable prices of the food served.

Just One Special Dish

A check-up with Miss Gilbert shows these menus to be the same as are served daily except for a little holiday trim and the addition of one special holiday dish, as creamed chicken at Thanksgiving and turkey at Christmas.

The special menus are advertised in the school paper and through posters placed on the school bulletin board and in the cafeteria. On the day they are served, the volume of sales is found to increase about 35 per cent. What is more, once having eaten there and noted the quality and reasonable prices, a large percentage returns daily thereafter.

This last year the main part of the menu for Christmas lunch comprised turkey broth with pimiento rings and parsley, creamed turkey and biscuit, mashed potatoes, buttered mashed turnips, buttered peas, choice of

salads, and choice of desserts. Milk and fruit were served as usual.

The salads were appropriately decorated—red and green cherries on the fruit salads, and cranberry jelly cubes on the vegetable and cottage cheese salads. Sandwiches were wrapped in red and green cellophane. Vanilla ice cream with a green Christmas tree center of lime ice was the principal dessert.

Other favorite desserts were cinnamon candy apples and pears; milk desserts, on which were placed red and green cherries, and cakes trimmed with small Christmas tree designs. Paper cups with holiday designs held tomato and fruit juices. The counter was decorated with a trimmed Christmas tree at each end, and table covers and paper napkins had Christmas designs.

Excellent Advertising

Miss Gilbert suggests that schools try this as a means of acquainting more pupils with the cafeteria service. "It is not possible," she adds, "to serve special lunches any earlier in the school year as there is little occasion for one. The holiday season, although it may seem late to introduce pupils to the cafeteria, is in reality a very opportune time. While such special lunches are regarded by the management as advertising, the pupil does not recognize them as such, and the extra effort has been found to be very much worth while."

A Word for the Janitor

LAURENCE R. CAMPBELL

THE most versatile, the most efficient, the most valuable man in the public school system is usually overworked and underpaid. He is neither the superintendent nor the principal, the teacher nor the librarian, the secretary nor the nurse. He is the janitor.

He's overworked because he is a carpenter, painter, mechanic, electrician, plumber, gardener and handy man whose day begins while teachers sleep and whose day ends while teachers play bridge or golf. Nor can he get away from it all in the summer to rest, to travel or to attend summer session. He's lucky if he can get any vacation, luckier if he can afford one when he gets it.

Demands for Quick Service

He's overworked because he is subject to the peremptory orders of other school employees who may interrupt his crowded routine to demand immediate service. They may want a piano moved to the stage, magazines stored in the basement, old pictures located in the attic. Teachers usually resent the intrusions of supervisors and parents, yet they think nothing of giving the janitor orders to do something immediately though immediate action may be unnecessary.

He's overworked because he is a health officer. Heat, ventilation and sanitation come under his supervision, but no system has been invented that will keep rooms cool enough for one teacher and warm enough for another. Nor do teachers hesitate to leave doors and windows open too long. It never occurs to them that they are often to blame for their own discomfort because they meddle too much.

He's overworked because he is a student counselor. Boys and girls usually like him because his guidance is casual, informal, sincere. They find his personality better adjusted than that of many teachers who don't seem to care to win friends and influence pupils. Likewise his philos-

ophy is more practical, his friendship more genuine. He is not a prima donna; he gives evidence of no superiority complex.

The principal or the teachers may be ill, but the school may never know it. Let the janitor be ill and the educational machinery comes to a standstill. Hence, it is much easier to replace a teacher than to get a new janitor who is satisfactory. Yet, although few school employees can handle as many jobs as capably as the janitor does, he is the most poorly paid.

He's underpaid because he has no white collar, no certificate, no degree. School administrators and trustees know that the janitor is usually so situated that he has to take whatever he gets so they cut down expenses by reducing his pay to the minimum. Though teaching salaries have increased lately it is probable that janitors have not been accorded fair treatment in salary adjustments.

He's underpaid because in democratic America it gives us a feeling of superiority to look down upon those who can use their hands as well as their heads intelligently. We are a bit smug and snobbish in our contacts with those who have dirty and disagreeable tasks. Probably it is natural to attempt to establish an artificial superiority when an actual inferiority exists.

What Janitors Want

Someone may recall a janitor who is cross, careless, lazy, officious or disagreeable. Some one may report a janitor who smokes, chews, drinks, swears or gossips—at the wrong time. And this proves that the janitor is somewhat like principals and teachers, many of whom cannot even keep their own desks or rooms in order.

What should be done about it? Janitors don't care to attend faculty meetings (and neither do many teachers) nor do they want their

"superiors" to be "nice" to them. What they do want are decent hours, decent wages, decent vacations. They should be able to afford health and accident insurance, to participate in some pension plan. Although janitors in a few big cities have become too powerful it is not likely that they will neglect their work as much as many teachers do.

Now is the time to provide for adequate compensation of janitors. More than that it is time to develop training programs, certification policies, standards to determine how much work he should do. Almost all janitors are assets to their schools, but they would be greater assets if they were not overworked and underpaid.

Classroom Radiators

Hugh P. Dolan, an engineer for the Detroit Board of Education, gives some simple facts about classroom radiators.

If the radiator in a classroom is hot, and the room is still cold, no adjustment of the thermostat will increase the amount of heat in the radiator. "The radiator may be too small or the steam may not have been on long enough to bring the room up to the desired temperature, but that is not the fault of the thermostat. To advance the setting of the thermostat will only prevent the instrument from shutting off the steam when the room does reach the proper temperature," Mr. Dolan explains.

"Likewise, if the radiator is cold, and the room is still too warm, there is nothing one can do to a thermostat that will make the radiator any colder. Thermostats can be made to operate all kinds of mechanical things but in the case of a classroom radiator the only thing the thermostat can do is to open or close the steam valve."

NEWS IN REVIEW

Five-Year Study

A five-year study of radio broadcasts for school use has been launched under direction of I. Keith Tyler, radio division, bureau of educational research, Ohio State University. The investigation will be concerned not so much with what is now being done in the way of school broadcasts, but rather with what can be done, Mr. Tyler says. Particular attention will be given changes in attitudes and development of new interests which may be brought about through school broadcasts.

The study is one of a series sponsored by the Federal Radio Education Committee, of which John W. Studebaker, U. S. commissioner of education, is chairman. Broadcasters, including both individual stations and the networks, are cooperating in the various studies.

Working with Mr. Tyler as associate director of the study is J. Wayne Wrightstone, formerly of Teachers College, Columbia University. Norman Woelfel, former editor of the *Social Frontier*, is research associate in charge of the social studies field; Louis Heil, formerly of Ohio University, Athens, is in charge of the science field study, and Alton O'Steen, formerly of the University of Minnesota, heads the arts field study. These investigators are assisted by a staff of Ohio State graduate students.

Chicago, New York, Detroit and California have been selected as the centers for the study, because in all of these places school broadcasts are originating. Under consideration are broadcasts in the fields of the social studies, in science and in the arts, which includes English and music. National, regional and local broadcasts are covered by the study, but only those planned for use in the schools.

INSTRUCTION

Labor Supports Vocational Courses

After an original protest against the proposed vocational training courses in Chicago's high schools, labor leaders have reversed that stand and pledged their support to the new plan following a conference with school officials.

Dr. William H. Johnson, superintendent of the Chicago schools, who

was first quoted in press reports as saying that he planned completely to revamp the school system to replace 80 per cent of the academic training with vocational courses, denied this proposal in the labor conference. Superintendent Johnson said that the vocational courses will not replace any academic work. They will merely be added as pupils and parents request them. He said the schools will not overload the market with cheap workers or school-trained apprentices.

To Meet Modern Demands

For eighteen months a committee on articulation and integrations of which Stephen F. Bayne, associate superintendent of the New York City school system, is chairman, has been working on a program for reorganizing high schools to meet educational needs of a changing social order. A sixteen-point program has been presented by the committee, providing for training of all children fifteen years of age and older.

Among the important points suggested is a diversified curriculum including courses leading both to institutions of higher learning and professional schools and to vocations and industries; emphasis upon vocational and avocational aims as general objectives of education, and training in proper habits and attitudes to develop critical thinking, self-reliance and initiative.

Hobby Classes for Cripples

Two hobby classes for crippled children unable to participate in physical education classes have been established at the Durfee Intermediate School, Detroit. Seventh and eighth-grade boys are being offered camp cooking and ninth-grade boys and girls are learning to make articles of wood and metal.

Cafeteria Short Course

So successful was the short course for school cafeteria managers conducted last summer at the Oklahoma Agricultural and Mechanical College, Stillwater, Okla., that arrangements are being made for a similar session June 6 to 10. Last year thirty-five school cafeteria managers registered and although a majority of them were from Oklahoma City schools, there was also a representation of a number of cities throughout the state. At that time such subjects were discussed as the selection

and use of meats, the place of the school cafeteria in the health program of public schools, nutrition principles and their relation to menu planning, making the cafeteria attractive and employer-employee relationships.

Books by Horseback

Not unlike the primitive circuit riders are the WPA library carriers who circulate some 30,000 books and 40,000 magazines to 280 back country centers in eighteen Ohio counties. A WPA carrier who operates out from West Union, county seat of Adams County, follows a route of which many of the roads are little more than wagon trails. During bad weather she is forced to abandon her small automobile, throw her books in a sack and mount the saddle of a pony in order to ford the creeks in reaching isolated one-room schoolhouses. Books are distributed from West Union during the school term twice a month to a total of fifty-three one-room schoolhouses, enjoying free library service for the first time.

In Kentucky during the last two years, WPA librarians have traveled by horseback, muleback, rowboat and afoot to deliver books and magazines to more than 100,000 persons in sixteen counties. Small mountain schools, open only from July to February, each has several subcenters to which the carrier must travel, covering a distance of from forty-five to sixty miles.

On projects sponsored chiefly by boards of education, WPA workers have repaired or rebound more than 12,000,000 school books for 15,000 public schools in the country.

English Exam Before Degree

Candidates for the A.B. degree in June, 1940, and thereafter at the University of Kansas must pass a proficiency examination in written English before enrolling for their final thirty hours of collegiate work, according to a recent regulation adopted by the faculty. The examination may not be taken sooner than the close of the sophomore year, and at least one semester must elapse between completion of freshman rhetoric and the taking of the examination.

Louisiana's Libraries

Under the free-library-book act passed in 1936 by the Louisiana legislature, the state is spending \$550,000 this year and next for free library books for distribution among its public, private and parochial schools. The state has provided free textbooks for all public, private and parochial schools since 1928 and will now provide supplies.

Art Collection

More than fifty reproductions of Old Masters and two original paintings are included in the recently acquired art collection of the Dwight Morrow High School, Englewood, N. J. They are used in connection with the study of art appreciation. A few American artists are included in the catalogue of listings, although the majority of the paintings belong to the Flemish, Dutch, Italian and Spanish schools.

ADMINISTRATION

Superintendent Backstage

Proving that the community will think about its schools if the opportunity is afforded, the superintendent of schools at LaGrange, Ohio, invited community organizations to participate in the observance of American Education Week.

Three weeks beforehand, the superintendent invited by letter each local civic, fraternal and religious organization to name a representative to serve on a planning committee for the local observance of the week. The response was 100 per cent. Faculty and pupil representatives also were elected to this committee, which met at the school two weeks in advance of the event. Within one and one-half hours an organization with an executive committee and nine subcommittees had been perfected: publicity, entertainment, registration, assembly, church, exhibit, parent-teacher, hobby and poster.

An elaborate program developed. Local organizations posted money for cash prizes, and declamation contests were held in high school English classes to select pupils to speak before the P-T-A. Pupils had complete charge of reception, registration and attendance contests. Committees were urged to take the initiative during the program, and the superintendent of schools remained entirely in the background.

Describes Gary Schools

As a part of the American Education Week program, Supt. William Wirt prepared a well illustrated booklet entitled "The Great Lockout in America's Citizenship Plants," which represents a complete description of the plans and operation of the Gary, Ind., schools, now in their thirtieth year of operation. Copies may be obtained by writing to Doctor Wirt.

Direct Culver Foundation

Admiral Hugh Rodman, U. S. Navy, retired, and William Edward Levis,

have been made directors of the Culver Educational Foundation, Culver Military Academy. Admiral Rodman served as director of the Culver Summer Naval School in 1926, and was appointed director of Culver Summer Schools again in 1931. Mr. Levis, who attended the academy for two years, is president of Owens-Illinois Glass Co.

Defining Uneducable

Under a Pennsylvania school law revised in 1937 the public schools were exempted from responsibility to educate children certified as "uneducable" by approved mental clinics and school psychologists. The State Council of Education was designated by the law to define "uneducability" and the procedure to be followed in exclusion cases. After such action, a mentally deficient child was then to be the responsibility of the welfare department.

At a recent meeting the council of education set forth standards to be used by psychologists for determining the "uneducability" of a child under state law, eliminating from public schools (1) a child with an intelligence quotient of less than 50, obtained on an individual examination basis; (2) one with an intelligence quotient between 50 and 69, demonstrating inability to learn self-support in a favorable environment and to learn in a special class, and (3) a child with an intelligence quotient below 75 accompanied by behavior symptomatic of permanent inability for self-maintenance in a favorable environment.

ANNIVERSARIES

Education Week in Panhandle

Down in the Panhandle area of Oklahoma where a scattered population and wind and dust make maintenance of a school a real problem, American Education Week observance was met with almost a 100 per cent response by the community of Lawverne, Okla. Signed invitations by the superintendent of schools, L. W. Curry, were sent all school patrons for the special parents' day convocation on Wednesday of Education Week. Another special assembly was held on Thursday, observing Armistice Day.

MEETINGS

Broadcasting Conference

Twenty-seven educational and socially-conscious groups, not content to let radio broadcasting take on certain

shapes and patterns before laws are passed regulating this new educational medium, gathered for the second annual Conference on Educational Broadcasting at the Drake Hotel in Chicago, November 29 to December 1. Approximately 250 representatives of these groups attended.

The conference passed no resolutions, as the group preferred to confer rather than to set definite policies at this time.

It was brought out at the conference that educational broadcasting may imply one of three things in the minds of educator, layman and broadcaster: (1) programs of the classroom instruction type, used as part of the school curriculum; (2) programs on chains labeled educational in purpose, and (3) generally speaking, any program on the air influences thought, and is educational.

Reasonable assurance that three megacycles of ultra-high frequency on the broadcast band would be allocated for the exclusive use of local school systems by the federal communications commission was predicted by John W. Studebaker, U. S. commissioner of education, who expects action from the commissions early in 1938.

The portion of the frequencies requested would provide approximately seventy-five clear channels suitable for short-range broadcasting. Commissioner Studebaker pointed out that this will make it possible for counties, or small educational units within a fifty-mile radius, to construct stations for educational programs within that area.

Responsibility for construction and development of the stations and their maximum use in the public interest will fall upon local school officials and other educational groups, Commissioner Studebaker said.

Janitorial Conferences

During November and December the division of vocational education of the Oregon State Department of Education directed eighteen regional conferences with school janitors. The conferences were personally directed by L. O. Thompson of Los Angeles, who has conducted many janitors' schools throughout the West. Indications are that janitorial work will be much improved as a result of the classes.

Personnel Conference

Youth occupational adjustment and educational administration are problems that will receive consideration at the joint meetings of member groups of the American Council of Guidance and Personnel Association gathering for annual conventions February 23 to 26 at Atlantic City. (Cont. on page 66)

The theme for joint meetings of the council is "The Coordination of Personnel and Guidance Work in Education." The opening address, by Morris L. Cooke, Philadelphia consulting engineer, will be on "General Organizational Principles Applicable to Educational Administration." Dr. W. H. Cowley, Ohio State University, will lead discussion by representatives of a university, a college, a comprehensive high school system and a county school system. A second joint session will be devoted to coordination of youth programs in communities.

Results of occupational adjustment advancements in various cities following the Occupational Education Tour for School Superintendents will be presented by a group of superintendents who made the tour as guests of the National Occupational Conference. Dr. Edwin A. Lee will lead the discussion.

Member groups of the council participating are the National Vocational Guidance Association and the National Association of Deans of Women, each with three-day programs; the American College of Personnel Association, the Alliance for Guidance of Rural Youth, the Western Personnel Service, the Teachers College Personnel Association, and the National Federation of Business and Professional Women's Clubs, with short programs. Other member groups of the council are: National Federation of Bureaus of Occupations, Institute of Women's Professional Relations, Personnel Research Federation, American Association of Collegiate Registrars and Eastern College Personnel Officers.

Honor for Doctor Judd

Presentation of the American Education Award for 1938 to Dr. Charles H. Judd, head of the department of education at the University of Chicago, will be made at the annual banquet of the American Association of School Administrators' convention at the Traymore Hotel, Atlantic City, on March 1. This announcement is made by Earl Opie, president of the Associated Exhibitors, an organization of some 150 firms manufacturing school supplies and equipment. The recipient of the 1937 award for outstanding achievement in education was the late Dr. William McAndrew.

Custodians and Retirement

At a recent meeting of the Finger Lakes Custodians Association, held in Waterloo, N. Y., arrangements were made for a January gathering to be held in Canandaigua. A speaker familiar with the state retirement plan will appear on the program and explain

Coming Meetings

Feb. 10-12—Oklahoma Education Association, Oklahoma City.
Feb. 17-19—International Council for Exceptional Children, Buffalo, N. Y.
Feb. 23-25—National Vocational Guidance Association, Atlantic City, N. J.
Feb. 26-Mar. 3—American Association of School Administrators, Atlantic City, N. J.
March 11-12—Junior High School Conference, New York University, New York City.
March 20-22—South Carolina Education Association, Columbia.
March 24-26—Representative Assembly, Michigan Education Association, Lansing.
March 24-26—Alabama Education Association, Birmingham.

March 24-26—Florida Education Association, Tampa.
April 13-16—Kentucky Education Association, Louisville.
April 14-16—Georgia Education Association, Atlanta.
April 16—Massachusetts Teachers Federation, Boston.
April 19-23—Association for Childhood Education, Cincinnati.
June 6-10—Short Course for School Cafeteria Managers, Oklahoma A. & M. College, Stillwater.
June 13-18—American Library Association, Kansas City, Mo.
June 26-30—National Education Association, New York City.

costs and benefits to employees coming within its provision. This information will be presented to district superintendents at the regular teachers' conference at Geneva on April 9.

Audio-Visual Institute

Educators from seven states—Minnesota, Michigan, Iowa, Wisconsin, North Dakota, South Dakota and Montana—gathered at the Center for Continuation Study, University of Minnesota, December 2 to 4, for the first regional institute on audio-visual aids.

The institute faculty was headed by Dr. Edgar Dale, director of the bureau of educational research, Ohio State University, and president of the department of visual instruction of the American Association of School Administrators. An account of the film project of the American Council on Education was presented by Dr. Charles Hoban, secretary of the council.

Demonstrations in audio-visual aids on the program were given by Donald Lewis, Red Wing High School, Red Wing, Minn.; Ella Mae Clark, State Teachers College, Winona, Minn.; J. E. Hansen, University of Wisconsin; Dr. C. P. Archer, State Teachers College, Moorhead, Minn.; Dr. Alice Keliher, chairman, Progressive Education Association; Ella C. Probst and David Strom, both of the Minneapolis public schools; Dr. H. A. Gray, Erpi Picture Consultants, Inc.; M. I. Smith, Hibbing public schools, Hibbing, Minn.; H. C. Bauer, superintendent of schools, Lakefield, Minn.; G. L. Berry, Glencoe, Minn., and Dr. H. B. McCarty, director of radio station WHO, University of Wisconsin.

Two important resolutions were adopted by the institute. The first resolution encouraged the committee on audio-visual aids, appointed by the institute, in its efforts to promote immediate extension of a more effective use of visual aids in education.

Another resolution urged teacher training institutions to set up courses of instruction in the use of visual aids, giving special attention to the needs of teachers now in service who must rely upon extension or summer school work for visual instruction. Another provision asked institutions to arrange for visual education regional conferences.

To assist in the development of the audio-visual program in the Northwest, a general committee, comprised of one member from each of the seven states, was elected: Iowa, H. L. Kooser, director of visual education, Iowa State College; Montana, Don G. Williams, Great Falls; Wisconsin, J. E. Hansen, director of visual instruction, University of Wisconsin; North Dakota, O. M. Anderson, Fargo High School, Fargo; South Dakota, Paul G. Tschetter, Webster, and, Michigan, Mary MacDonald, Wakefield.

BUILDINGS

Park Avenue Campus

The new building for Hunter College, delayed by disputes over height and site between the New York board of higher education and the municipal art commissioner, soon will begin rising on Park Avenue, New York City, between Sixty-Eighth and Sixty-Ninth Streets. Modifications will limit the height to sixteen stories, accommodating 5,000 pupils. The building is to cost \$5,000,000.

New Junior College

Work on the first unit of San Francisco's proposed \$2,250,000 junior college will start early in January and 1,700 students, now scattered throughout the city and attending junior college classes in sixteen different locations, may expect to start their 1939 spring semester's work in their own \$800,000

plant. The first unit has been designed by Timothy Pfeuger and John R. Miller, well-known architects of the bay area. The building will be of modern design of reenforced concrete and will be located on a fifty-acre campus at Balboa Park in the Ingleside district.

Engineers Go to Night School

In-service courses for Detroit Board of Education engineers and firemen include a new special class in "Boiler Operation and Combustion," open only to junior firemen. Regular evening classes now running include: steam engines, steam laboratory, temperature control, fan operation, electrical maintenance and electrical maintenance laboratory. There is no tuition to these classes for board employees.

FINANCE

One-Third Restoration

Chicago's 13,500 teachers and 4,500 other public school employees, whose salaries were cut 15 per cent monthly under the board of education's economy measures in 1932, will have one-third of the cut restored to them on January 1. The salary increases, totaling \$4,000,000, also include two weeks' additional pay, since the Chicago schools will be open two weeks longer in 1938 than they were in 1937.

An elementary school teacher, whose basic salary was \$2,500 before any cuts were put into effect, will receive a pay increase of \$225 a year. A high school teacher with a basic salary of \$3,800, who by the economy measures was reduced to a low of \$2,907, will under the new arrangement receive \$3,249.

The board will return to a full ten-month school year as soon as finances permit.

Repay Savings Losses

Although neither the St. Louis Board of Education nor the officials and teachers were legally responsible for any losses resulting from the closing of banks in the school savings system during 1933, they have accepted a moral responsibility to see that there is no loss to the children. Early in December distribution of 30 per cent of the deposits of 10,530 school children in the defunct Savings Trust Company was begun. The money came from a fund contributed largely by Dr. Henry J. Gerling, superintendent of instruction, teachers, principals and other school employees. The school savings accounts in this bank amounted to \$81,596.64, 40 per cent of which already has been repaid out of the assets of the bank.

NAMES IN NEWS

Superintendents

DR. EDWIN C. BROOME, for the last seventeen years superintendent of schools, Philadelphia, has been granted leave of absence for six months beginning January 1. At the end of the six months he plans to retire from the superintendency.

O. S. DAHLGER, principal of Osakis High School, Osakis, Minn., for three years, has been named superintendent to fill the vacancy caused by the resignation of L. S. HARBO. Mr. Harbo has accepted a position as head of the school system at Litchfield, Minn.

GEORGE BRAGDON, for three years principal of the North Haven High School, North Haven, Me., has been elected superintendent of the school district which includes North Haven, Vinalhaven and Swan's Island, succeeding E. A. SMALLEY, who resigned because of illness.

E. R. HADLOCK will retire as superintendent of county schools at Erie, Pa., next July 1, and WILLIS E. PRATT, present assistant, is expected to be named in his place.

E. P. SCHINDLER, superintendent of schools at Madrid, Iowa, has been named superintendent of schools for Story County, Iowa.

WILLIAM B. APPLETON, acting superintendent of schools at Leominster, Mass., since the recent death of DR. WILLIAM H. PERRY, has been named superintendent.

ROWENA K. HAMPSHIRE has been appointed deputy state superintendent of public instruction in Colorado, succeeding Mrs. LUCY C. AULD, who resigned to accept the position of director of correspondence and records. Miss Hampshire was formerly in the department of public speaking of the Colorado Springs High School.

EDWARD MANDEL, associate superintendent, New York City schools, recently began his fiftieth year of service in the New York City school system. He is sixty-eight years old, and does not look forward to retirement.

GAYLE F. PEICK, principal of the high school at Union, Iowa, has been elected superintendent of the Fairview Consolidated Schools near Alta, Iowa.

ALBERT E. GOWER, former high school principal, New Boston, Ohio, has become superintendent of county schools, Ross County, Ohio, exchanging his present position as superintendent of Darke County schools with HARRY S. REES, Ross County superintendent.

W. D. WILKERSON, for seven years superintendent of the schools of Cal-

vert, Tex., becomes the new superintendent of schools at Bryan, Tex., January 1.

Principals

ARTHUR C. PHELPS, former superintendent of schools, Labette County, Kansas, has been appointed principal of the Boys' Industrial School, Topeka, Kan.

CHARLES O. BEAMAN has retired as principal of the Eastview Avenue Junior High School, White Plains, N. Y. He will be succeeded by L. PAUL MILLER, now acting principal of the Mamaroneck Avenue School.

MARY R. BRAND, principal of Ullrich School, Decatur, Ill., has resigned after forty-seven years of teaching. GENEVA M. WILLIAMS, sixth grade teacher in the school, has been appointed temporary principal for the remainder of the semester.

WILLIAM M. BARLOW, acting principal, New Dorp High School, Tottenville, N. J., has formally been nominated for the principalship of the school. He organized the new high school at New Dorp in September, 1936, and recently has been granted a principal's license.

KATHERINE E. KERRIGAN, principal, Winslow Street School, has been transferred to the principalship of the Adams Street School, Worcester, Mass. Her successor at Winslow Street is MARY E. REGAN, principal of the Lincoln Street School. CLYDE DOOLITTLE, teacher of history and mathematics at Grafton Street Junior High School, was appointed principal of the Lincoln Street School.

LINDON E. CHRISTIE has been elected principal of Monson Academy, Monson, Me. He formerly was principal of Sedgewick High School, Limerick High School and Winter Harbor High School.

C. STELLA CRAMER has resigned as principal of the Raritan Intermediate School, Somerset County, N. J. She will continue as a classroom teacher. Mrs. TERESA KELLY, who has been assistant principal, was named principal.

WILLIAM WIENER, Central High School principal, Newark, N. J., will retire January 19 because of the mandatory retirement age rule. The fact that the board has voted \$20,000 for modernization of the school technical equipment predicts selection of a successor with technical as well as administrative background, according to press reports.

HARVEY D. BRASEFIELD, for twenty years principal of Fremont High School, Oakland, Calif., resigned recently because of ill health. DR. E. W. JACOBSEN, school superintendent, appointed DR. REX H. TURNER, vice prin-

principal, as acting principal. Doctor Brasefield's resignation ended a forty-two-year teaching career.

State Departments

DR. LEE M. THURSTON, deputy superintendent of the Michigan Department of Public Instruction, has resigned to accept a professorship in school administration at the University of Pittsburgh. Doctor Thurston will take up his new duties with the beginning of the second semester.

DON CASH SEATON, former track coach at the University of Illinois, has been appointed to the newly created post of state director of physical education for Illinois by JOHN A. WIELAND, state superintendent of public instruction. Mr. Wieland said the appointment came through recognition of the need of a technically trained man to "supervise, coordinate and construct school programs of health, safety and physical education throughout the state." Mr. Seaton has organized and directed a statewide health and physi-

cal education curriculum committee appointed by Superintendent Wieland and composed of fifty principals, teachers, athletic coaches, nurses, county superintendents and directors of physical education. Its purpose is to formulate workable programs of health and physical education for all grades in schools throughout the state.

STANLEY WYNSTRA, principal of the R. A. Long High School, Longview, Wash.; LELAND P. BROWN, superintendent of schools, Olympia, and Mrs. LOUISE S. TAYLOR, superintendent of schools, Pierce County, Wash., are new appointees to the Washington State Board of Education for two-year terms.

DR. V. D. BAIN will direct elementary and rural education for the Oregon State Department of Education.

LESTER WILCOX, now entering his tenth year as superintendent of schools, Lebanon, Ore., has resigned his post to accept a position in the state school superintendent's office.

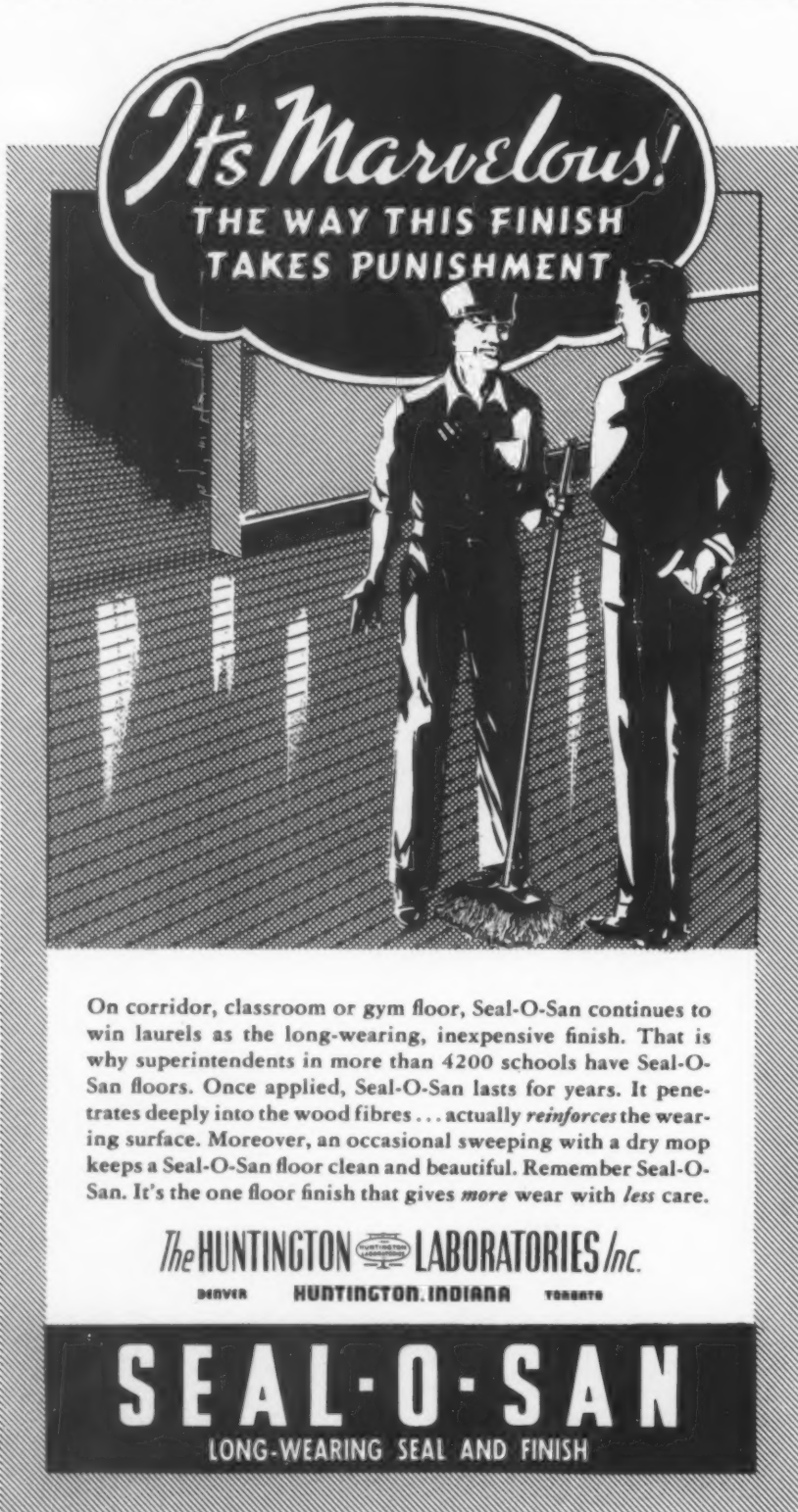
JOHN A. SHEFFER, Gettysburg, Pa., has been appointed senior school business adviser in the Pennsylvania bureau of administration and finance by LESTER K. ADE, superintendent of public instruction.

ROBERT E. MCKEE of Etna, Pa., has been appointed adviser in the division of industrial education of the Pennsylvania Department of Public Instruction.

In the Colleges

DR. DONALD M. ERB, Stanford University professor of economics, has been named president of the University of Oregon by the state board of higher education. Doctor Erb will replace DR. CLARENCE VALENTINE BOYER, who resigned several months ago because of ill health. Doctor Erb will be the youngest chief executive ever installed at Oregon. He is thirty-seven years of age, and received the bachelor of science degree at the University of Illinois in 1922. In 1925, while in the Harvard graduate school working toward the Ph.D. degree, he was appointed Thayer fellow. Upon completion of that fellowship he was awarded the coveted Ricardo prize for outstanding work in economics, and in the summer of 1930 received the Sheldon traveling fellowship. Doctor Erb was a member of the University of Oregon faculty for six years before going to Stanford University.

DR. OLIVER C. CARMICHAEL will be installed as third chancellor of Vanderbilt University on February 3. In connection with the inauguration and attendance of leading educators, a symposium on higher education in the South has been arranged. PRESIDENT ISAIAH BOWMAN of Johns Hopkins will deliver the inaugural address.



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DR. J. P. WHITT has succeeded DR. JOHN PRESTON McCONNELL as president of the State Teachers College, East Radford, Va.

DR. CHARLES N. SHAVER recently was officially inaugurated president of the Sam Houston State Teachers College, Huntsville, Tex., succeeding DR. HARRY F. ESTILL, who resigned September 1 to become president emeritus.

C. O. WILLIAMS, associate professor of education, has been appointed director of the bureau of records and recommendations in the school of education at Pennsylvania State College.

DR. CHARLES A. HOWARD, newly elected president of the Eastern Oregon Normal School at La Grande, was inaugurated on December 14. For the last ten years state superintendent of public instruction for Oregon, Doctor Howard assumed his presidential duties at the beginning of the fall term.

HAZEL FLOYD, intermediate grade supervisor, Hammond, Ind., for a number of years, has been made director of elementary education at the teachers' college at Nacogdoches, Tex.

DR. WILLIAM HENRY McMASTER, dean of Ohio college presidents, has resigned the presidency of Mount Union College. He will complete thirty years as president with the close of the current year. DEAN MELVIN W. HYDE will become acting president until a new president takes office.

C. O. HOLLAND, former supervisor of rural schools in Avoyelles parish and principal of the Bunkie High School, Bunkie, La., and now president of the People's Bank and Trust Company of Minden, La., has been appointed executive vice president of Centenary College, Shreveport, La.

DR. HELEN D. BRAGDON has resigned as dean of the College for Women at the University of Rochester. She plans to engage in research studies in education after July 1, 1938, when she will relinquish her post at the college.

DR. GUY E. SNAVELY, who has been president of Birmingham-Southern College since 1921, has submitted his final resignation. He is now on a year's leave of absence from the college serving as executive secretary of the American Association of Colleges.

DR. HUBERT SEARCY of Birmingham-Southern College has accepted the position as president of Huntingdon College, Montgomery, Ala., which became effective December 1.

DR. R. C. TOMPKINS has resigned as superintendent of the Louisiana State College and Training School, Alexandria, La., because of ill health. No successor has been named.

DR. HERBERT PATTERSON, dean of the school of education, Oklahoma Agricultural and Mechanical College, Still-

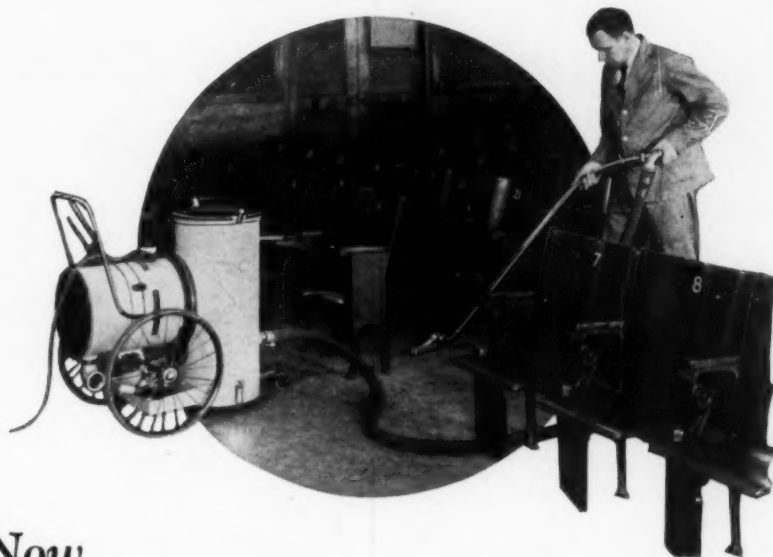
water, has been made dean of administration. His successor as dean of education is DR. N. CONGER, former state director of teacher training for Oklahoma.

DR. GEORGE H. MACK, for eleven years president of Missouri Valley College, Marshall, Mo., has resigned. He is soon to reach the retirement age of sixty-five, and is relinquishing his post before the national campaign for ten million dollars, soon to begin under the Presbyterian Board of Christian Education, is started. Doctor Mack feels the

new president should be in his place to lead the college in its share in that effort.

GEORGE H. ARMACOST has been appointed associate professor of education, College of William and Mary, Williamsburg, Va.

DR. JACK W. DUNLAP, for the last six years associate professor of education in the graduate school of Fordham University, has been made associate professor at the University of Rochester where he will take part in developing a program of teaching and research



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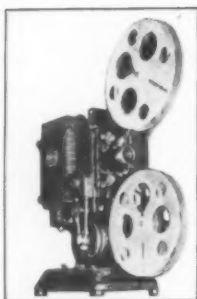


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AMPRO has made the 16 mm. talking motion picture as practical as the silent film for school use. The Amprosound reproduces the sound film with smooth, clear, natural tone, equal to that of a professional theatrical performance; and has been specially designed so that a student can easily operate with no more skill than is needed for the operation of an ordinary radio. Threading is simplified by the use of guides, so that film finds its proper position almost automatically. The Amprosound is distinctively different in design and principle, with many remarkable features not to be had in any other equipment. You will be astonished at the quality of 16 mm. sound-on-film projection which you may now secure on Ampro equipment at low cost.

Complete Line of 16mm. Projectors

Ampro offers a quality line of 16 mm. Silent and Sound-on-Film Projectors including silent models that can be converted into sound. "Ampro" Projectors are standard equipment in the world's largest school systems—in thousands of schools and universities all over the world. Send coupon for prices and full details.



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N S 138

in measurement and in educational psychology. Doctor Dunlap is editor of the *Journal of Educational Psychology* and a member of the editorial board of the *Journal of Experimental Education and of Psychometrika*.

PROF. E. H. REEDER, formerly of Teachers College, Columbia University; PROF. B. O. SMITH of the University of Florida, and PROF. P. L. SPENDER, on leave of absence from the Claremont Colleges in California, are new members of the college of education faculty at the University of Illinois.

Miscellaneous

M. M. KONARSKI, assistant superintendent in charge of business affairs for the board of education, Akron, Ohio, has severed his connection with the Akron schools and is going into business for himself. Mr. Konarski is a specialist in schoolhouse construction, operation and maintenance. He has had the unique experience of operating the buildings which he has designed in the city of Akron. Mr. Konarski has been employed by the board of education, Kanawha County schools, Charleston, W. Va., as consultant on the county's \$2,000,000 building project.

RALPH MCNEAL DUNBAR, Ames, Iowa, has been appointed chief of the library service division of the U. S. Office of Education; EDITH GANTT, Fairfield, Calif., and NORA BEUST, Chapel Hill, N. C., have been appointed specialists on the library staff.

HAROLD H. THRELKELD, principal of the Englewood High School, Englewood, Colo., has been made assistant in student personnel at the University of Denver.

FREDERICK A. ZEHNER, since 1936 psychologist in the Connecticut Department of Education, has been appointed educational psychologist for the school system of Greenwich, Conn.

HENRY E. PEARSON, former city engineer, Bedford, Ind., is the new superintendent of buildings and grounds at Indiana University.

DR. JOSEPH DOLIVER ELLIFF, from 1904 until his retirement in 1935 professor of high school administration at the University of Missouri, has been awarded the distinguished service medal of the Missouri State Teachers Association in recognition of his work for the development of high school education in Missouri and the standardization of Middle Western secondary schools.

DR. CECIL W. CREEL, director of extension at the University of Nevada, was elected president of the Association of Land Grant Colleges and Universities at the recent annual meeting in Washington, D. C. DR. J. A. BURRUS, president of the Virginia Polytechnic

Institute, was named vice president, and THOMAS P. COOPER of the University of Kentucky, secretary-treasurer.

GEORGE STANTON, city supervisor of the emergency adult education project, has been appointed assistant director of emergency adult education for Syracuse and Onondaga County, New York, succeeding DeFORREST LAVOY, who has been made principal of Percy M. Hughes School.

DR. LEVI D. GRESH, West Reading, Pa., has been appointed assistant director for Pennsylvania of the National Youth Administration in charge of student aid, to succeed KARL T. WAUGH, who resigned. The position involves the administration of a student work program in eighty-two colleges and universities, and approximately 1,200 public and private secondary schools in Pennsylvania. Some 9,000 college students and 25,000 secondary school pupils are aided by the program.

J. L. SKINNER, president of the Richmond County Academy and of the Junior College of Augusta, Ga., has been elected director of the William R. Moore School of Technology, Memphis, Tenn. Construction of the new school will start by April 1 and is expected to be completed in time for the 1938 fall term.

Deaths

CHARLES F. LENZ, for twenty-eight years controller of the Los Angeles Board of Education, died at his home recently in that city. Among other national activities, Mr. Lenz was prominent in the National Association of Public School Business Officials.

ERNEST WHITLEY, county superintendent of schools, Jewell County, Kansas, was killed recently in an automobile accident.

CHARLES D. MONTGOMERY, sixty-one, submaster of the Newburyport High School, Newburyport, Mass., died recently of heart disease.

DR. JOHN CAREY ACHESON, president of Macalester College and civic leader of St. Paul, Minn., died recently at the age of sixty-seven.

RAYMOND BEVERLY, principal of Walton High School, Walton, Ky., died recently at Christ Hospital, Cincinnati. He was thirty-two years of age.

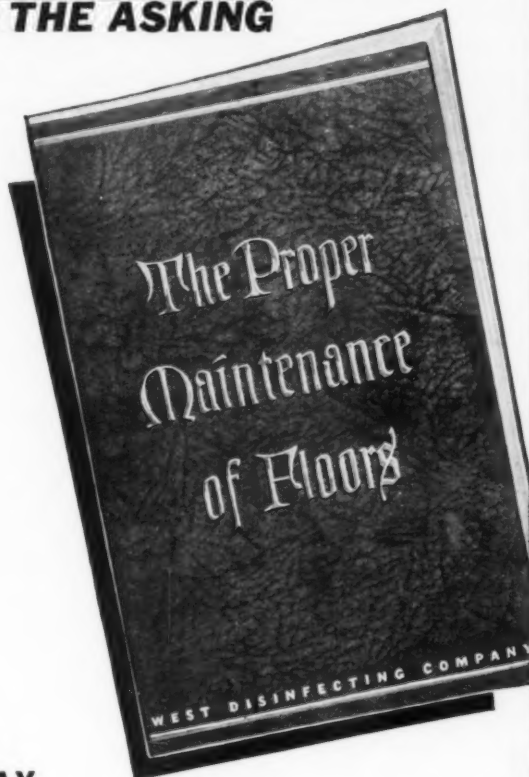
WILLIAM H. DOTY, principal emeritus of Newburgh Free Academy, Newburgh, N. Y., died recently at the age of eighty years.

JULIUS C. HAMMEL, seventy, principal of the Dewey School, Oakland, Calif., and for forty-two years prominent in Oakland educational activities, died recently after an illness of two months.

CLARENCE P. DANFORTH, thirty-nine, principal of Monticello High School,

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The following types of floors
are included in this booklet:

UNPAINTED WOOD	PAINTED OR VARNISHED SURFACE
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MAGNESITE OR HARD MASTIC	GARAGE FLOORS
	WASHROOM FLOORS
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The last word in portable assembly chairs and—equally superior folding chairs.



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ROYAL PORTABLES are the standard of excellence. Look at the finish, the accuracy of the quiet mechanical action, method of bracing and weight of material. Then consider that with all the leg room and ease of passing to inside seats, they still seat more in a given space.

They are beyond comparison

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SHOW MOVIES or STILLS

The Easy Time-Saving Way!

With a Da-Lite Challenger Screen, getting ready to show pictures is no problem for the teacher. This screen has a tripod and can be set up instantly, anywhere.* No delay clearing books from a table or desk! The screen is also adjustable in height to the projection requirements of any room. The Challenger is only one of many types in the Da-Lite line, which includes box type table models, hanging wall screens and stationary auditorium screens.

Da-Lite portable Screens have glass-beaded or mat white surfaces. The glass-beaded surface is usually best for classroom use as it gives the brightest, clearest pictures. For auditoriums, Da-Lite theatre-type stationary screens are also available with silver surfaces and in seamless form.



*The Da-Lite Challenger consists of a roller-mounted screen in a metal case to which a tripod is pivotally attached. The extension support of the Standard Challenger locks automatically in place. The De-Luxe Challenger models have crank and gear lifts.

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Monticello, Me., died following a short illness from pneumonia.

GARLAND HARRELL, forty-three, principal of Eaton Rapids High School, Eaton Rapids, Mich., died recently following an appendectomy.

DR. GEORGE SVERDRUP, president of Augsburg Seminary and College, Minneapolis, for twenty-six years, died recently of heart ailment.

DR. WINFIELD A. HOLCOMB, for twelve years principal of Geneseo State Normal School, died after a long illness. Doctor Holcomb was also former chief of teacher certification in the New York State Department of Education.

RADIO

Becomes Agency's Radio Adviser

Dr. Samuel N. Stevens, dean of the university college and professor of psychology at Northwestern University, as well as chairman of the institution's radio committee, has been engaged by the Ruthrauff and Ryan advertising agency's Chicago office as psychological adviser. In this capacity he will examine all radio program material passing through the Chicago office, with power to reject it if he does not believe it

On the Air During January

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time.

Daily

12:30-1:30 p.m. — National Farm and Home Hour (NBC Blue).¹

Monday

2:30-3:00 p.m. — American School of the Air, Exits and Entrances, history and current events for junior and senior high school pupils (CBS).

5:30-5:45 p.m. — Dorothy Gordon, Children's Corner (CBS).

6:15-6:30 p.m. — Explorers' Series, sponsored by the American Museum of Natural History (CBS).

10:30-11:00 p.m. — National Radio Forum (NBC Blue).

10:30-11:00 p.m. — Brave New World, Latin-American program sponsored by the U. S. Office of Education (CBS).

Tuesday

2:00-2:30 p.m. — Fun in Music, band lessons under direction of Dr. Joseph Maddy (NBC Red).

2:30-3:00 p.m. — American School of the Air, American literature alternating with music (CBS).

Jan. 4 — Minnesingers and Mastersingers.

Jan. 11 — The American Novel, Zona Gale.

Jan. 18 — A New Creed and a New Song.

Jan. 25 — American Poetry, Robert T. Tristram Coffin.

4:30-5:00 p.m. — Stories of Industry, sponsored by the U. S. Department of Commerce (CBS).

5:15-5:30 p.m. — Science Service Series, dramatizing and explaining latest scientific developments (CBS).

5:30-5:45 p.m. — Drama of the Skies, Hayden Planetarium program on astronomy for juveniles and adults (CBS).

6:00-6:15 p.m. — Science in the News (NBC Red).

Wednesday

2:00-2:30 p.m. — Your Health, supplementary material for health teaching in junior and senior high schools, sponsored by the American Medical Association (NBC).

Jan. 5 — Sneezes and Sniffles.

Jan. 12 — Scarlet Fever, Measles and Whooping Cough.

Jan. 19 — Smallpox and Diphtheria.

Jan. 26 — Poliomyelitis.

2:30-3:00 p.m. — American School of the Air, geography (CBS).

Jan. 5 — The Peasant Kingdom of Roumania.

Jan. 12 — Istanbul, a Decapitated Capital.

Jan. 19 — Pennsylvania Farms, Flowers and Seeds.

Jan. 26 — Tropical Products in New York City.

3:30-3:45 p.m. — Current Questions Before the House, each week a different member of the House of Representatives discusses a current problem (CBS).

4:30-5:00 p.m. — Youth in a Modern Community, sponsored by the radio forum, National Congress of Parents and Teachers (NBC Blue).

Jan. 5 — Around the World, Mrs. Francis H. Blake, international relations chairman.

Jan. 12 — Preserving Our Inheritance, Mrs.

Mary T. Bannerman, legislation chairman. Jan. 19 — Who Makes Social Codes? Aimee Zillmer, social hygiene chairman.

Jan. 26 — Mid Pleasures and Palaces, Mrs. Scott Wood, juvenile protection chairman.

5:30-5:45 p.m. — Dorothy Gordon, Children's Corner (CBS).

6:00-6:15 p.m. — Our American Schools, sponsored by the N. E. A. to promote teacher welfare and better support for schools (NBC Red).

10:30-11:00 p.m. — U. S. Cabinet Series, presenting a different member of the President's cabinet each week (CBS).

Thursday

2:30-3:00 p.m. — American School of the Air, primary music (CBS).

Jan. 6 — Game Songs in England.

Jan. 13 — Animal Songs and Games.

Jan. 20 — Songs and Games of Winter.

Jan. 27 — Mozart's Birthday.

3:30-3:45 p.m. — Science Service Series (CBS).

4:30-5:00 p.m. — Education for Living, sponsored by the General Federation of Women's Clubs (NBC Blue).

5:00-5:15 p.m. — Current Questions Before the Senate, a member of the Senate is heard each week discussing a current problem (CBS).

Friday

2:00-3:00 p.m. — Damrosch Music Appreciation Hour (NBC Red and Blue).

2:30-3:00 p.m. — American School of the Air, vocational guidance (CBS).

Jan. 7 — Interview With Workers in Cotton Fields.

Jan. 14 — Interview With Textile Worker and Dress Designer.

Jan. 21 — Interview With Workers in Dress Manufacturing.

Jan. 28 — Preparing for the Job-Hunt.

5:30-5:45 p.m. — Dorothy Gordon, Children's Corner (CBS).

6:00-6:15 p.m. — Education in the News, dramatization of news items in education by the U. S. Office of Education (NBC Red).

Saturday

10:30-11:00 a.m. — Let's Pretend (CBS).

11:00-11:15 a.m. — Our American Schools, sponsored by the N. E. A. to bring home and school in closer cooperation (NBC Red).

11:00 a.m.-12:00 p.m. — Cincinnati Conservatory of Music, symphonic and small instrumental recitals of classical and contemporary music (CBS).

10:00-11:30 p.m. — NBC Symphony Orchestra (NBC Red and Blue).

Sunday

10:30-11:00 a.m. — Music and American Youth (NBC Red).

12:30-1:00 p.m. — University of Chicago Round Table (NBC Red).

3:00-5:00 p.m. — New York Philharmonic-Symphony Orchestra, with John Barbirolli conducting (CBS).

4:30-5:00 p.m. — The World Is Yours, thrilling adventures in the world of science by the Smithsonian Institution (NBC Red).

¹Except Sunday.

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THIS HEYWOOD-WAKEFIELD Movable Chair Desk is a well built, practical unit which offers correct posture, complete comfort, a large writing surface . . . and all at a reasonable cost. The floating type arm and curved-out support assure maximum usability of the writing surface which is *directly* in front of the student. For those schools with limited budgets for 1938 equipment, this S 701 chair desk is particularly suited. May we tell you more in detail about this and many other practical school furniture styles in the Heywood-Wakefield line?



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is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions. In more serious cases, consult a physician.

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After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935)

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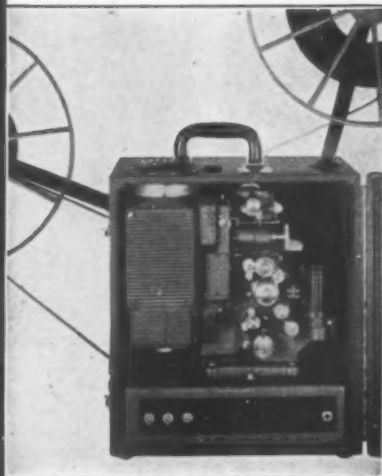
SEES ALL—PLAYS ALL UNIVERSAL 16 MM SOUND PROJECTOR

1+1=2



New All-Purpose Model

Now, for the first time, an ALL-PURPOSE 16 MM Sound Projector is offered to you. Completely flexible for the varied demands of classroom and auditorium



Adjustable as easily and as quickly as your radio to tone quality for small group work but with plenty of built-in reserve power for large audiences. Clear, steady image projected to any desired size. No complicated threading. Easy on film. Requires no trained operator. Handsome modern case design. Can also be used for silent films. A Universal comes to you complete, ready to operate. No extras to buy. May be purchased on the Universal Budget Plan. See your dealer or write for further details to

Universal Sound Projector

Division of
SENTRY SAFETY CONTROL CORP.

1919 Oxford St., Phila., Pa.
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sound in its social and educational impacts. By appointing a nationally known educator with experience in the radio field the agency hopes to check the rising tide of criticism against certain types of programs, particularly those directed at children. This agency believes that a program can have sound social merit and be commercially profitable at the same time.

Broadcast by Remote Control

Formerly students and faculty members from the University of Oregon at Eugene have traveled to Corvallis, Ore., to broadcast over radio station KOAC, owned by the Oregon state system of higher education. Recently the first broadcast by remote control was given from Eugene over the station at Corvallis. A second program of the experimental series has gone on the air and if the series is satisfactory, regularly scheduled remote-control broadcasts will be made over KOAC by the University of Oregon.

A similar type of broadcast is now in the process of development at Indiana University, which will broadcast programs over commercially-owned stations in Indianapolis, more than forty miles away from the university by long distance telephone.

High School Newscasts

A semiweekly broadcast over the school public address system has been substituted this year at the Coshocton High School, Coshocton, Ohio, in place of the high school newspaper, *Tom Tom*. Speaking over a public address system connected with each of the school's twenty-five rooms, the newspaper staff presents regular news and features in a ten-minute period known as the "Tom Tom of the Air."

The entire staff opens the program with a theme song in unison. Outstanding news of the day comes next. Follows then the historian who presents a biographical sketch of a faculty member. Adding a touch of feminine appeal, the society editor speaks on anything from latest gossip to "Advice to the Lovelorn." Topping this column of the air is the sports editor. Lastly come activity notices and sometimes an editorial by Principal Mahlon A. Povenmire. The theme song closes the program.

The news broadcast was devised by Principal Povenmire to replace difficulties and financial worries of a printed newspaper and to utilize the newly installed loud-speaker system. With an enrollment of 700 this year, more than 150 pupils have asked to participate in the news presentations, thus attesting

the popularity of the programs. Each pupil will be given two tryouts at broadcasting, those making good being given a more permanent berth on the staff.

VISUAL EDUCATION

10,000 Projectors in Schools

More than 48,000 reels of instructional motion pictures and 10,000 projectors are now owned by elementary and secondary schools in the United States, it has been estimated by Charles F. Hoban, Jr., of the American Council on Education. More than 400 new film subjects, produced by thirteen government bureaus, are available for free distribution in schools.

Now Being Shown

"The River," U. S. Farm Security Administration documentary film, which had its premiere during December and which has been voted an exceptional photoplay by the National Board of Review, will now have special showings in the larger cities of the country.

The play is a successor to "The Plow That Broke the Plains" and was written and directed by Pare Lorentz, film critic. A special descriptive musical score was written by Virgil Thomson, concert pianist and authority on modern music. The score is played by musicians from the New York Philharmonic Orchestra under direction of Alexander Smallens.

Michigan's New Films

Fifty-five educational films, covering natural and physical sciences, health and hygiene, geography, industrial processes and civic problems, may be rented from the University of Michigan through a new division of its extension service. The new film service is an innovation this year and will be continued if a popular demand is shown among schools, parent-teacher associations and other educational groups. Rental charges, \$1 a day for silent films and \$1.50 a day for sound films, cover maintenance and shipment charges on the films to the user. Lists may be had from the Extension Service, 107 Haven Hall, Ann Arbor.

Film Appreciation in Curriculum

A motion picture appreciation course has been made a regular part of the junior year curriculum at West High School, Rochester, N. Y. For two years the school has had elective motion picture courses for which pupils received



MEDART SCHOOL EQUIPMENT



STEEL WARDROBES

The "Lockerobe" for elementary schools. Pioneered by "Medart." Approved and installed by leading architects and school officials.

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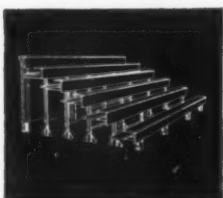
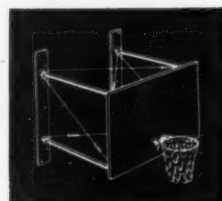
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BASKETBALL BACKSTOPS

Standard or special equipment; complex or simple installations; consult "Medart" for an efficient solution to your backstop problems.

Write for Catalog BB-2



TELESCOPIC GYM SEATS

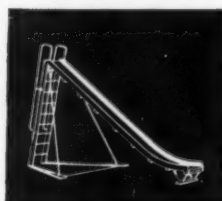
Nothing to lift up or pull down . . . Medart Gym Seats operate on the approved telescopic principle. Complete engineering service.

Write for Catalog GS-1

PLAYGROUND APPARATUS

A complete line; safe to use and safe to buy! Easily installed with Medart engineering prints to guide you.

Write for Catalog P-3



POOL EQUIPMENT

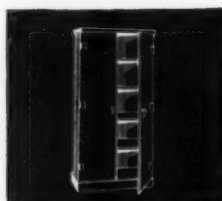
Medart slides, diving boards, ladders, towers and other pool equipment are fully described and illustrated in the new Catalog.

Write for Catalog WS-1

STEEL CABINETS

Protect your office supplies, records, and your clothing; store them in a Medart Steel Cabinet or Wardrobe. Baked enamel finish.

Write for Catalog C-13



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Deskor Has Saved Boston Many Thousands of Dollars

Deskor Chair convertible units have been installed in a number of Boston's new and old schools. Every installation resulted in substantial money savings and capacity increased.

Among these was Dorchester High School for Girls.

At the time when additional classroom and study station capacity was vitally needed in Dorchester High, the City of Boston did not construct the added floor space necessary to provide desks for eleven classrooms. Instead of doing this Boston discarded outmoded assembly hall seating from two large rooms and installed Deskor Chair convertible units in them.

Eleven classrooms at prices in effect when Deskor Chair convertible units were installed would have cost approximately \$200,000. Deskor installation at prices in effect at that time cost \$13,455.

And Dorchester High School for Girls was but one of a number of Boston installations each of which saved substantial amounts of money by increasing capacity in old buildings with no additional construction, or decreased cost of construction in new buildings.



DESKOR CHAIR SALES CORPORATION
Winthrop Building **Boston**



WHY IS PERFECT PROJECTION NECESSARY?

● Prime reason for the success of the motion picture as an educational tool is that, properly presented, it holds the students' full attention.

To realize to the full this value of motion pictures, projection and sound must be so perfect that eyes are not fatigued, that ears catch every word without conscious effort, that interruptions in presentation are avoided.

To get out of a film all that has been put into it, a truly fine projector must be used. Commercial studios which produce industrial films almost unanimously insist that their films be reproduced with the one projector that will present them at their best—the Bell & Howell Filmosound.

Bell & Howell, makers since 1907 of Hollywood's preferred professional ciné-machinery, build equipment as fine mechanically and optically as can be produced by the best craftsmen in this field. Naturally such equipment costs somewhat more originally, but those who buy it find that the small difference represents a definitely lengthened projector life and a freedom from the upkeep bills that make cheaper construction more costly in the end.

"NEW HORIZONS," a recently published booklet, will familiarize you thoroughly with the new teaching tool, the educational motion picture... with its nature, its applications, its values, the technique of using it effectively, and the experiences of educators who are using it. Send the coupon for your free copy. Bell & Howell Company, Chicago, New York, Hollywood, London. Established 1907.

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NS1-38

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School

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BELL & HOWELL

school credits. Author of the courses, which will be regularly studied in Rochester high schools, is Beatrice R. Tripp, a member of the West High School faculty, whose work in motion pictures has won her recognition and election to the presidency of the Rochester Motion Picture Council.

Color and Sound on 16-Mm.

For the first time sound has been used on a 16-mm. color film, "Beyond the Rainbow," produced by the Calco Chemical Company, to tell the story of the dye industry. Six prints of the film were made from the original, which are said to be as vivid and colorful as the first film, another new development in duplicating color on 16-mm. films. The film takes forty-four minutes to show and may be obtained by writing the company's motion picture laboratories at Bound Brook, N. J.

Animated Engine

Animated photography that depicts the historic development, construction and operation of the modern internal combustion engine and operating parts of the automobile are contents of the new two-reel silent motion picture film,

"The Power Within," which is the latest addition to the U. S. Bureau of Mines film library. Copies of the film, in 16 and 35-mm. sizes, are available for exhibition. Applications for the film should be addressed to the Bureau of Mines Experiment Station, 4800 Forbes Street, Pittsburgh. No charge is made for use of the film, although the exhibitor is expected to pay transportation charges.

Depicts Chemical Process

A new two-reel silent film in 16 and 35-mm. sizes depicts the construction and operation of the oxy-acetylene torch and the oxy-acetylene process for joining and severing metals. It is available from the U. S. Bureau of Mines Experiment Station, 4800 Forbes Street, Pittsburgh. Reel 1 illustrates how acetylene, the fuel gas for the oxy-acetylene flame, is produced by the chemical action of water and calcium carbide. Reel 2 illustrates the use of the process in cutting and welding metals, repairing damaged metal appliances, bronze-welding joints, welding pipe lines and construction of all-metal automobile bodies. No charge is made for use of the film, although the exhibitor is asked to pay transportation charges.

Films for the School Screen

Biology VII — Animal Life

Four Seasons — Response of animal life to seasons; metamorphosis, hibernation, shedding antlers. Arranged by Dr. R. L. Ditmars. 4 reels. 16 mm., silent and sound, 35 mm., silent. For rent. Wholesome Films Service, Inc., 48 Melrose Street, Boston.

How Nature Protects Animals — Various ways by which animals are provided with devices to conceal themselves, either for the purpose of protection, or as a means of securing food; fleetness of foot, mimicry, protective coloration, armor and secluded homes; rabbit, raccoon, giraffe, tiger, lion, zebra, goat, pheasant, looper caterpillar and the bee-hawk moth. 1 reel. 16 and 35 mm., sound. For rent. Erpi Picture Consultants, Inc., 250 West 57th Street, New York.

Let's Go to the Zoo — A trip through the zoo, showing many curious animals and explaining their habits; what they eat and how they act toward people and other animals. 1 reel. 16 mm., sound. For rent. Nu-Art Filmco, 145 West Forty-Fifth Street, New York City.

Evolution — Study of animal life of million years ago in comparison with that of today. 3 reels. 16 and 35

mm., silent and sound. For rent. Garrison Film Distributors, Inc., 729 Seventh Avenue, New York City.

Doctor Ditmars' Series — The curator of the New York Zoological Society presents some rare pictures of the animal and submarine kingdoms. Series of 1 reel each. 16 and 35 mm., silent and sound. For rent. Wholesome Films Service, Inc., 48 Melrose Street, Boston.

Mammals, Some Larger — Herds of bison, black bears, Virginia deer, wapiti (American elk) and moose are shown in their several types of wild surroundings. 1 reel. 16 and 35 mm., silent. For sale or for rent. Teaching Films Division, Eastman Kodak Company, Rochester, N. Y.

Simba — The late Martin Johnson's dramatic record of Africa's animal life in the unspoiled freedom of their native plains and jungles. Herds of elephants pass at close range. Wild beasts by the thousands surge through the yellow grass where Simba, the African lion, lies in wait. 60 minutes. 35 mm., silent. For rent. American Museum of Natural History, Seventy-Seventh Street and Central Park West, New York City.

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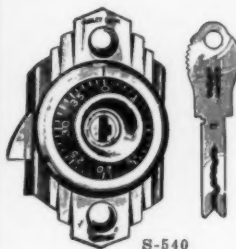
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MAN, BREAD AND DESTINY. THE STORY OF MAN AND HIS FOOD! By C. C. Furnas and S. M. Furnas. New York City: Reynal & Hitchcock, 1937. Pp. xix+364. \$3.

This well written volume is recommended to those individuals who can take their science and discard their superstitions. Faddists and "naturalists" won't believe it but the admonition is clear—if you want to increase your chances of living longer it contains a recipe well worth the price. Find a place for it in the school library.

ANARCHY OR HIERARCHY. By S. de Madariaga. New York City: The Macmillan Company, 1937. Pp. 244. \$2.50.

Both fascism and communism are rejected as final choices in favor of a reorganized liberal democracy. After listening to "one-choice" propaganda, this volume is a welcome relief to him who still believes in the possibilities of liberty.

THE FOLKLORE OF CAPITALISM. By Thurman W. Arnold. New Haven, Conn.: Yale University Press, 1937. Pp. vii+400. \$3.

An analysis of American thought and action processes by a keen critic who delights in separating the realism of fact from the principles claimed for them. Fascinating reading.

EARLY JAPANESE HISTORY. PART A AND PART B. By Robert Karl Reischauer. Princeton, N. J.: Princeton University Press, 1937. Pp. Part A: xiii+405; Part B: 249. \$7.50 a set.

The beginning of what promises to be a significant and outstanding historical contribution. The first volume covers the period from 40 B.C. to A.D. 1167 and presents a detailed work based upon Japanese sources. Divided into two parts, the second of which will, in its complete form, form a dictionary of Japanese history.

THE BOOK OF BIRDS. VOLUMES I AND II. Edited by Gilbert Grosvenor and Alexander Wetmore. Color portraits by Major Allan Brooks. Washington, D. C.: National Geographic Society, 1937. Pp. 738. \$5 a set.

The superb collection of photographs and color plates of birds in the United States and Canada that has been progressively developed for more than five years has been brought together in two volumes of 633 bird biographies, with 950 full-color plates by Allan Brooks. An outstanding work that is indispensable for school science libraries.

THE GOOD SOCIETY. By Walter Lippmann. Boston: Little, Brown and Company, 1937. Pp. xxx+402. \$3.

Neither radical nor reactionary will respond enthusiastically to this interpretation of the possibilities for the rational reconstruction of liberalism. Rejecting collectivism and planned economy the conclusion points to a need for emancipation from "privilege, power, coercion and authority."

REDISCOVERING THE ADOLESCENT. A STUDY OF PERSONALITY DEVELOPMENT IN ADOLESCENT BOYS. By Hedley S. Dimock. Illustrations by Harold E. Haydon. New York City: Association Press, 1937. Pp. xx+287. \$2.75.

As a result of some interesting research in growth during a specific period in the child's life, the author makes certain rational suggestions to the educator that are contrary to traditional concepts but packed with much "horse sense." Highly recommended for secondary teachers and principals.

TEACHERS AND COOPERATION. Issued by the Committee in Charge of the Yearbook on Cooperation of the Department of Supervisors and Directors of Instruction of the National Education Association. Ann Arbor, Mich.: S. A. Curtis, University of Michigan, 1937. Pp. 84. Single copies, \$0.25; lots of ten, \$0.23; twenty-five, \$0.21; one hundred, \$0.20 (Paper Cover).

A contribution that teachers and administrators cannot afford to miss.

FIRST INTERLINEAR GERMAN READER. By Meno Spann. Chapel Hill, N. C.: The University of North Carolina Press, 1937. Pp. vi+75. \$0.40 (Paper Cover).

A new method that deserves experimental trial to determine its classroom possibilities.

BOOKS THAT HAVE SHAPED THE WORLD. By Fred Eastman. Chicago: American Library Association, 1937. Pp. 62. \$1.

Three lists of significant books in biography, drama and other literature to increase your enjoyment of the library.

THROUGH THE YEARS WITH OUR CONSTITUTION. By Henry W. Elson. Boston: The Stratford Company, 1937. Pp. iii+220. \$1.50.

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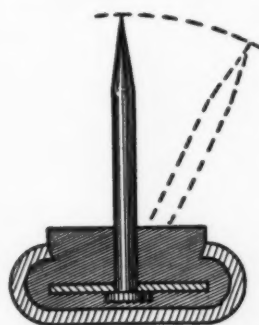
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A NEW SOCIAL PHILOSOPHY. By Werner Sombart. Princeton, N. J.: Princeton University Press, 1937. Pp. xii + 295. \$3.50.

Translation of a significant German contribution by Karl F. Geiser. While it is developed from a German background, it treats problems that are of increasingly common significance to the world.

JUST OFF THE PRESS

SCHOOL BROADCASTING IN GREAT BRITAIN. By Lester Ward Parker. Chicago: The University of Chicago Press, 1937. Pp. ix + 160. \$1. (Paper Cover).

FILM AND SCHOOL. *A Handbook in Moving-Picture Evaluation.* By Helen Rand and Richard Lewis. A Publication of the National Council of Teachers of English. New York City: D. Appleton-Century Company, Inc., 1937. Pp. xv + 181. \$1.12.

ECONOMICS. BASIC PRINCIPLES AND PROBLEMS. By Rudolf K. Michels. New York City: The Gregg Publishing Company, 1937. Pp. viii + 614. \$1.60.

TEN YEARS OF SHORTHAND REFERENCES (CLASSIFIED) 1927-1937. By Clyde E. Rowe. New York City: The Gregg Publishing Company, 1937. Pp. viii + 53. \$0.24 (Paper Cover).

FRENCH COMMERCIAL CORRESPONDENCE AND READINGS. By Louis J. Fish and William B. Snow. New York City: The Gregg Publishing Company, 1937. Pp. viii + 257. \$1.20.

GREGG TYPING. Second Edition. Complete Course. By Rupert P. Sorelle, Harold H. Smith, William R. Foster and Clyde I. Blanchard. Pen Sketches by Loren Barton. New York City: The Gregg Publishing Company, 1937. Pp. x + 304. \$1.60.

TRAITS CHARACTERISTIC OF MEN MAJORING IN PHYSICAL EDUCATION AT THE PENNSYLVANIA STATE COLLEGE. By Nelson Sumter Walke. Contributions to Education, No. 735. New York City: Bureau of Publications, Teachers College, Columbia University, 1937. Pp. vii + 62. \$1.60.

A TEACHER'S GUIDE TO EUROPE AND ASIA. By Pearl H. Middlebrook and Beatrice M. Collins. New York City: Silver Burdett Company, 1934, 1937. Pp. v + 116. \$0.40 (Paper Cover).

EVERYDAY PROBLEMS IN ECONOMICS. By Cornelius C. Janzen and Orlando W. Stephenson. New York City: Silver Burdett Company, 1935, 1937. Pp. ii + 158. \$0.60 (Paper Cover).

TEACHING ARITHMETIC IN THE ELEMENTARY SCHOOL. VOLUME I, PRIMARY GRADES. By Robert Lee Morton. New York City: Silver Burdett Company, 1937. Pp. x + 410. \$2.40.

CHARACTER AND PERSONALITY OF CHILDREN FROM BROKEN HOMES. By Nehemiah Wallenstein. Contributions to Education, No. 721. New York City: Bureau of Publications, Teachers College, Columbia University, 1937. Pp. vi + 86. \$1.60.

LABORATORY AND WORKBOOK UNITS IN CHEMISTRY. By Maurice U. Ames and Bernard Jaffe. Nonconsumable Edition. New York City: Silver Burdett Company, 1935, 1937. Pp. xiv + 255. \$1.12.

LABORATORY AND WORKBOOK UNITS IN CHEMISTRY. By Maurice U. Ames and Bernard Jaffe. Consumable Edition. New York City: Silver Burdett Company, 1935, 1937. Pp. xvii + 237. \$0.84 (Paper Cover).

SAFE LIVING. By C. W. Hippler and Helen Burr Durfee. Illustrated. Chicago: Benj. H. Sanborn & Co., 1937. Pp. iv + 188. \$0.80.

CAPITALIZING INTELLIGENCE. EIGHT ESSAYS ON ADULT EDUCATION. Summer Lecture Series, 1937. Edited by Warren C. Seyfert. Cambridge, Mass.: The Committee on Publications, Graduate School of Education, Harvard University, 1937. Pp. 141. \$0.75 (Paper Cover).

SURPRISE STORIES. By Marjorie Hardy. Chicago: Wheeler Publishing Company, 1937. Pp. 144. \$0.60.

OUR COUNTRY FROM THE AIR. By Edna E. Eisen. Illustrated. Chicago: Wheeler Publishing Company, 1937. Pp. 224. \$1.20.

CHRISTIANITY AND SEX. By Richard C. Cabot, M.D. New York City: The Macmillan Company, 1937. Pp. vii + 78. \$1.

UNITS IN SOCIAL STUDIES. Grade Five. The Problems, Peoples, and Countries of North America, South America, Our Island Possessions. By L. S. Hance and W. W. Ankenbrand. Philadelphia: The John C. Winston Company, 1937. Pp. 126 (Paper Cover).

SPORTSMANLIKE DRIVING SERIES: How to Drive; Training New Drivers. Illustrated pamphlets of the Safety and Traffic Engineering Department, American Automobile Association. Washington, D. C.: American Automobile Association, 1937 (Paper Cover).

WORKBOOK IN EDUCATIONAL MEASUREMENTS. By I. N. Madsen. Ann Arbor, Mich.: Edwards Brothers, Inc., 1937. Pp. v + 113. \$1.60 (Paper Cover).

THE ADMINISTRATION OF PERSONNEL IN CORRECTIONAL INSTITUTIONS IN NEW YORK STATE. By D. Ross Pugmire. Contributions to Education, No. 722. New York City: Bureau of Publications, Teachers College, Columbia University, 1937. Pp. viii + 182. \$2.10.

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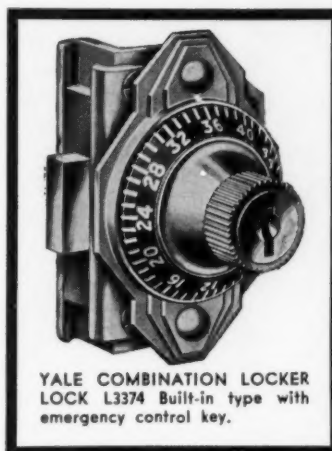
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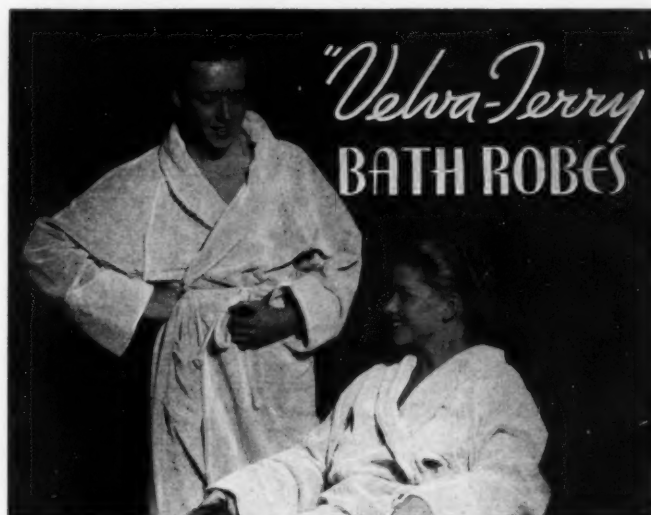
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NOTES FOR BUYERS

At the Hotel Show

Unfortunate that more school people could not have browsed around the exhibits of the Hotel Exposition held in New York recently. Guardians of the gate at Grand Central Palace regarded with suspicion anyone who did not have a hotel air about him. At that there was a good representation of school cafeteria managers on hand, as well as a scattering of home economics women, to see "what was what" in new equipment as applied to their respective departments. Their efforts were rewarded, too, judging by the amount of literature they were seen carrying away.

Better Dishwashing

The name Hobart is one to conjure with in the matter of kitchen equipment. Naturally it was the spot for which many of our cafeteria and home economics friends headed immediately they entered the Grand Central Palace.

Hobart incidentally has done something for dishwashing—made it fool-proof as it were. We refer to Model AMC in which the company's engineers have provided safeguards insuring proper operation with minimum supervision. The wash water, in other words, must reach the temperature for which the control is set before the motor can be operated—and the motor will automatically cut off if the temperature of the wash water drops below that degree. Timing of the wash operation is automatically controlled—proper time and temperature for the rinse are assured—the operator cannot slight any step in the cleansing process.

This equipment is something to see. The Hobart Manufacturing Company, Troy, Ohio, will tell you where.

Hot Food Storage

We all know the familiar taste of meat and vegetables that have been kept standing. Few of us who have not become all steamed up over them, at one time or other, and they have suffered similarly, as we well know.

A group of cafeteria people was discovered one afternoon at the show standing about a demonstration of what are known as electric "hot food storage receptacles," and, judging from the enthusiastic comments, superintendents will have already been approached on the subject of modernizing the hot food service in their respective schools.

Without going into too minute details, these are containers made of heavy castings individually adjusted, and automatically hold the right temperature for each food. A rugged "snap-action" thermostat is mounted on the bottom center of each receptacle. It is provided with a temperature-adjusting shaft which projects up through the bottom of the casting. This shaft terminates in an adjustable indicating pointer recessed in a numbered dial, plainly visible on the inside bottom of the receptacle when it is mounted on a hot food storage table. The indicating pointer and the dial provide a convenient means both of adjusting the temperature to that best suited for the particular food to be stored, and noting the numerical setting for future reference.

The receptacles can be applied to new hot food serving tables or to tables now in use. They may be had in two general types—one for standard round jars and one for standard counter pans. The trade name Hotpoint gives away the secret. The Edison General Electric Appliance Company, Chicago, is the maker.

Large in Tone Quality

Leaving the hotel show to take care of itself, we now pass on to moments musical. What administrator has not, at one time or another, searched for desirable means of giving pupils a more substantial foundation in the fundamentals of music? A superintendent we know believes he has found the solution in the marimbanette, a small marimba designed especially for school music teaching. Rhythmic development, he says, is neatly combined with reading, hearing and playing music in this easily-learned instrument.

Its clear, soft tones come as a welcome relief to eardrums battered by tubas and cellos played with all the reticence of a fire engine siren. The marimbanette is made by the Leedy Manufacturing Company, Elkhart, Ind.

Rugged Individualist

Seldom do we meet an out-and-out rugged individualist these days, and thus we respectfully salute Seal-O-San, a product of the Huntington Laboratories, Inc., Huntington, Ind., a thorough-going individualist in its rugged resistance to pounding, scraping feet.

The pattering of thousands of tiny (and not so tiny) feet is music to the

warm heart of Seal-O-San. It can also show a face impervious to ink, chemicals or water. Its nonskid surface recommends it for gymnasium floors, but many school administrators that we know do not stop there, they use Seal-O-San on floors throughout the building.

An economy note that will strike a responsive chord for many schoolmen is that the finish can be applied by the janitor, with a lamb's wool mop, two thin coats being enough to outlast many ordinary floor finishes. Its durability, we are told, is due to the fact that the finish actually becomes a part of the floor itself, the liquid penetrating deeply, filling every cell and forming as it hardens an airtight seal against dirt and moisture.

Sun Spotter

Mythology gave us Cyclops with his all-seeing eye. Modern science has gone imaginative invention one better in perfecting the electric eye, which can peer into every nook and corner of the room as it guards the pupils' eyesight.

This alert electric eye senses the moment the light on one side of the schoolroom falls below the desired illumination level and promptly turns on a row of lights. When the sun is doing its job properly this same control turns off the lights and awaits the next time the sun decides to take a rest. It functions silently so that there are no interruptions for the teacher or pupils, yet it conserves artificial light because the lights are used only when needed.

So that all schools can start the new year adequately lighted, the General Electric Company, Schenectady, N. Y., is now manufacturing these photo-electric relay controls in greater quantities and at the same time is offering them at about one-fourth of the original cost. The equipment is easily installed and may be flush or surface mounted.

Squeeze the Tomato

Freud or Adler could probably explain our lifelong urge to squeeze big red tomatoes, a whim we have indulged on all possible occasions. Thus, we crowded with delight when we encountered the other day a juice dispenser made to look like a ripe, overgrown tomato. When you want a glass of tomato juice, which we did immediately, you squeeze the stem at the top and out comes the juice from a spout at the bottom. A great improvement on nature, we call it. We defy you to find a pupil who will be able to resist the eye appeal of this colorful dispenser. Ask the Barnham Dispenser Company, Milwaukee, Wis., about it.

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IT ISN'T just "another year, another convention," but "a new year, a better convention" to those who are planning the meeting of the American Association of School Administrators. That, also, is the policy of this magazine. It's a new year with better convention coverage, the Editors resolve.

Not that we heard anything but praise for last year's job—you remember, the tabloid newspaper that was fresh and breezy without being sensational in tone. So many subscribers liked that little twelve-page news bulletin, with its not too candid camera shots, that we shall repeat—repeat and improve on it.

Because it calls its middle section "The Convention News," the March number has to reach subscribers while the news is still steaming. Our goal is to have President Sexson's copy on his desk in Pasadena by the time he gets there. Of course, if he and the rest of you make the homeward journey by air, we won't be able to match your pace. We can't stow away 8,500 copies on an airship.

NEWS summaries hardly suffice, we think, so the convention issue of *THE NATION'S SCHOOLS* devotes most of its section on educational administration to important convention papers. A good speech is always worth an analytical reading, most of us being predominantly eye-minded. Then just in case someone should make a mistake and miss a certain important session, no one back home need suspect, with the magazine right at hand to give him the whole or the gist of it. No one of course means to miss an important meeting, but the weight of committee work, salt water baths, lobster diet,

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boardwalks and merry-go-round places a severe demand upon the schoolman's energy and time. Still going to a convention is nice work—if you can get it.

MORE and more gratefully superintendents, directors of food service and cafeteria managers are turning to the school feeding section of *The NATION'S SCHOOLS* for monthly guidance. Dr. Mary deGarmo Bryan edits this section, and with her as editorial consultant the department cannot help but win friends and influence people.

Let's take a peep into the hopper to see what's coming for school nutritionists. The dietitian at Wellesley College, Constance C. Covey, will describe next month the centralized feeding control that has supplemented almost entirely the previous system of dining room and kitchen control by individual heads of houses.

Edna Gilbert, cafeteria manager of the Rayen School, Youngstown, Ohio, probably in April, will tell of the new and complete system of food cost accounting and food control that has been in operation since September, 1936.

Several picture units will tell their own stories with captions, in the manner of *Life* magazine. Among these are "Mealtime at Milton," showing the layout of equipment in the kitchens, dining rooms and teachers' dining alcoves in a Massachusetts junior high school; "Rochester Does It Right," demonstrating new efficiencies in lunchroom conduct by means of modern cafeteria equipment; "Cafeteria in a Courtyard," being views of one of the finest school cafeterias in America, that of the English High School, Boston.

Other articles scheduled include: "Chefs in the Making" by Helen McIlheney O'Brien of Baltimore; "Lessons From Lunch" by Laura H. Hoch of Reading, Pa., and "Students Solve Cafeteria Problems" by Marguerite Tice of Milwaukee.

In all articles, be they ever so concerned with costs and administrative efficiency, emphasis is first, last and always on *The Child and His Nutrition*. You can bank on that!

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LOOKING FORWARD

Atlantic City Meeting

A WELL balanced program, with plenty of opportunity for individual participation through small group discussion, a good convention center with adequate and conveniently located meeting places and hotel accommodations should make the 1938 meeting of the American Association of School Administrators decidedly attractive to superintendents, supervisors and principals.

In line with the recommendations of the Committee on Longer Planned Programs, together with the willing cooperation of groups meeting simultaneously with the administrators, most of the competition and overlapping of meetings has been eliminated, giving the undivided stage to the major convention gatherings. Provision for the greater opportunity for social gathering is also a decided improvement. While most of the reservations were made before the end of June, Atlantic City's convention capacity is so great that those who were able to make only last minute plans will still find it possible to be accommodated. The annual exhibit of supplies, equipment and books, one of the biggest educational attractions of the meeting, promises to be of unusual value to professionally interested visitors.

Propaganda Isn't Simple

IN A recent issue of *Contact*, published and written by Edward L. Bernays, counsel on public relations, he reviews the organization of the Institute for Propaganda Analysis and points out some of the difficulties in the way of determining categorically and objectively the truth in any field without adequate and sustained research by competent specialists, with the expenditure of much time and money. The gist of his balanced criticism is well expressed in his own words when he says that: "There is a common error, even among wise men, that absolute truth can be separated from special pleading just as simply as wheat from chaff; that you can use a sieve and drain away propaganda, leaving nuggets of truth. . . . That a group of individuals should set itself up to establish for us, by any stand-

ards, a fair or accurate interpretation of the actions of our leaders, whatever their ideology, without hundreds of scientific investigators at their command and a J. Edgar Hoover and his 'G' men leading the research, seems a most unscientific procedure."

With Edward L. Bernays' point of view and its logical development there can be little quarrel. The study and analysis of propaganda are among the most difficult problems confronting democracy. The gentlemen who form the board of advisers and the institute's executive secretary, Clyde R. Miller, would be among the first to admit it. That they are inadequately supplied with money to carry on any serious investigations they already have admitted. The purpose of the new institute is frankly explorative. Its members appreciate the fact that it may take a long time before its findings have any real validity. It should have an endowment of several millions of dollars in order to make even a slight dent in this highly complicated problem.

Neither can it be denied that propaganda plays an extremely important part in our lives and is much more significant than the average individual is capable of understanding at present. The effort of the Institute for Propaganda Analysis represents to us a tiny voluntary effort on the part of a limited group of individuals to make certain sections of the public more conscious of the part played by propaganda in the larger sense and progressively to develop means whereby this important work may be carried on more scientifically. However, the hope that any complicated social activity will ever lend itself to the same complete objectivity that prevails under controlled laboratory conditions with inanimate material is also beyond the realm of immediate possibility.

If the Institute for Propaganda Analysis can make the educational leaders of this country conscious of the forces at work and some of the methodologies employed, without developing finality or omniscience, it will have accomplished a service of exceptional value. If, from this stimulus, there develops the desire for much more serious and deeper study of the field and its progressive adaptation to the teaching process, it may consider its work a success.

The criticism of Edward L. Bernays is well taken and will probably be willingly received by members of the institute. Its effort represents an unusual experiment and as such is deserving of strong support by educational and other social leaders. In time it may become within much more restricted and limited sense a service in the social sector equivalent to the various types of consumer research in the economic areas. Sane, healthy criticism like that offered by Edward L. Bernays should be a stimulant to growth.

Let's Do Something

A VERITABLE flood of manuscripts has passed over our desk in recent months bemoaning the fact that teachers in village and rural areas have little freedom and must live under the continued surveillance and restrictions of village Mother Grundys and must conform their personal lives according to the dictates of a highly aggressive and narrowly sectarian clergy.

All of the charges and statements in these writings are undoubtedly true. Several outstanding examples have been checked directly and the only reaction is that the writers were really guilty of understatement. Analysis of each presentation also indicated that while the authors were able to discover the annoying effects of these restrictions none of them attempted even a bare analysis of the causes.

Granted that there exist throughout the country in public education serious restrictions on the freedom of the teachers, it is highly debatable whether any value accrues to their continued presentation through the medium of professional publications. There may be a definite value in discussing these restrictions but the effective mediums are magazines of general circulation where they may be helpful in educating the lay reader to some of the difficulties under which the public school teacher must work. The effectiveness in presentation to lay readers depends also on the ability to present these restrictions in a humorous vein rather than on a too emotional level.

From the professional point of view it might be well to consider some of the possible restrictive causes and to determine whether they are possible of improvement or elimination. Our own studies indicate that restrictions upon teachers have initially the traditional basis that regards the teacher as a public servant just one step removed from the clergy.

However, a much more specific factor is the lack of elbow space for the individual. So long as our small and inadequate rural and village school districts exist, social surveillance of the individual teacher is going to continue. When a relatively few people are living together in a small area and when the adult interests are intensely local, any variation from village mores will cause comment. This condition is probably accentuated by the normal attitude of the small town

habitant for the stranger or "outlander." These marginal districts offer so narrow a program in the schools, confined almost entirely to the children, that there is little opportunity for the enrichment of adult life. Lack of finance and professional leadership leaves the school as a routine activity for the children.

Lack of finance and the restrictions this inadequacy places on ability to attract outstanding personnel tend also to produce a low average in a professional ability. The teacher in the marginal training brackets does not have a sufficiently broad education to provide understanding of the culture in which he is placed. The too frequent haphazard selection of individuals who have been born and reared in larger population centers further complicates the situation.

The unfortunate administrative concept preached so freely some years ago that educational and business organizations are analagous activities has strengthened an already present autocratic concept in educational administration in which the community tends to think of the superintendent as a community leader and the teachers as quite inferior or merely as hired educational "hands." Too many superintendents and superintendents' wives feel that they are the educational "parents" of teachers and carry their authority much too far into the private life of the teachers. When all of these restrictions are further combined with the factor of size or spatial inadequacy, they produce the current undesirable restrictions.

The remedy lies in several fields. The most important is the extremely essential reorganization of marginal small town and rural districts into more rational sociologic and economic units or interrelated communities, sufficiently large to carry the essential child and adult educational programs demanded today.

Structural reorganization will provide elbow room for greater individual freedom. The second set of problems is in the training of the teacher to a better social understanding of the world in which he must work. Control of subject matter and methodology is of little avail if the teacher is not also socially and professionally intelligent and capable. The third point of attack is in the development of a functional concept of public school administration rather than a continuation of the unfortunate teaching that education and business are just alike, thus maintaining and supporting the manager-labor practice.

The responsibility for bringing about this improvement rests squarely with the teaching profession. It is the duty of the teachers as an organized group to study causes and conditions and to develop possible remedies. The entire condition is capable of improvement if the teachers are willing to develop a dynamic public opinion with respect to need. However, the public is probably not so much directly interested in the freedom and welfare of the teachers as it is in the progressive im-

provement of the educational function for their children. In the development of a favorable attitude for change it appears desirable again to forget about the restrictions upon the teacher, emphasizing rather the social and educational values accruing from change. If the change can be successfully made to a more rational modern administrative area, the indirect result will be greater freedom, security of tenure, improved salaries and better working conditions for the teachers.

Taxing State Employees

ACCORDING to recent reports there are 4,891,000 state, county, and municipal employees, including teachers, receiving a total of more than three billion dollars annually who do not pay a federal income tax owing to the decision of the United States Supreme Court that the federal government cannot tax a state, or that a state cannot tax government income. Thus a large amount of possible revenue escapes both the state and the federal government.

There is no logical reason for these exemptions; in fact their existence might be listed as a social liability. It is dubious procedure to permit the development of a tax-exempt classification under a democratic form of government. Every government employee should be subject to taxation on exactly the same basis as every other citizen.

There appears to be a solution to this situation created by court decision without waiting for the lengthy process of constitutional amendment. If every state in the Union passed a uniform income tax, it would be possible to secure contributions from all state, county and municipal employees; federal personnel is already subject to the federal income tax. By this simple means the states could easily raise more revenue, secure better balance in their tax systems and eliminate the progressive dissatisfaction on the part of many citizens who feel that public servants now constitute a privileged class.

Deeper Study Recommended

THE recommendations of the sectional committee on standards of school lighting of the American Standards Association adopted in July, 1937, and printed elsewhere in this issue, include startling increases over the mandatory 1932 standards. In some cases the new standard is 200 per cent higher than the 1932 mandatory minimums. In addition, the committee apparently considers these new standards as minimums and adds that "higher levels are desirable."

The National Council on Schoolhouse Construction, by vigorous resolution, declined at its 1937 meeting to approve these proposed increases in lighting because these increments were adopted "without apparent adequate supporting data." Instead, the National Council

on Schoolhouse Construction recommended "a further study to the end that scientifically conducted experiments and tests be carried on over a sufficient length of time to determine objectively the lowest intensities of properly distributed and diffused artificial light that can be used in the various parts of a schoolhouse to provide conditions for correct visual acuity and prevent deleterious effects on the eyes."

There is much merit in the stand taken by the National Council on Schoolhouse Construction. The new standards mean a large increase in the amount of current used, and this fact will be quickly reflected in the cost of school plant operation. Qualified physicians are by no means agreed that heavy increases in light intensities are desirable at this time. Before these new standards are accepted and used in school buildings it is desirable that a carefully planned series of experiments be conducted under the joint auspices of the competent and disinterested authorities. An experiment of such importance to the country as a whole might well be organized under the direction of the public health division of the federal government in cooperation with the American Medical Association, the Illuminating Engineering Society, the American Institute of Architects, the National Council on Schoolhouse Construction, the American Association of School Administrators, the American Educational Research Association, the Bureau of Standards and the United States Office of Education.

The results of objective experimentation approved by so broad a group of specialists would have a validity and finality that the current recommendations for increased light intensities do not have. Boards of education and superintendents should exercise extreme caution in accepting the proposed standards until such experimentation has been carried out.

School Spirit

THE subjective element in the instructional activity which some call "morale" and others "school spirit" has been variously defined at different times and in different places. A brief paragraph by the late Paul C. Stetson, the last bit of writing before his sudden death, engenders several ideas worth repeating and is reproduced verbatim for those who are interested.

"What is this school spirit? It is that of devotion to high ideals; of the best standards of personal conduct; of loyalty to those institutions and friends which deserve loyalty; of good sportsmanship at all times; of moral as well as physical courage in every crisis; of joy in the accomplishment of worth while tasks, and of reverence for the finer values of life."

The Editor



JUSTIN CLINE

In this colonist car, which became the 1937 Rolling Youth Hostel, thirty young people traveled across Canada, down the Pacific Coast and visited Santa Fe and the Grand Canyon before returning home.

Hikers, Bikers and Riders



THE beginnings of the Youth Hostel Movement in the United States were presented in the August, 1937, issue of *The Nation's Schools*. This second article will seek to trace the increasing popularity and growth of what promises to become a most significant recreational and



Above: Hostellers leaving the youth hostel at Brattleboro, Vt. At right: Arriving at the Saline Valley Youth Hostel at Saline, Mich. Several farm boys are on hand to exchange experiences with the travelers.

educational movement in this country. Although the first hostel was opened in New England late in 1934, the 1937 report showed a total of 110 hostels or youth centers.

The unbounded, outspoken enthusiasm of young people, educators, clergymen, recreation leaders, social workers, business men, philanthropists, statesmen, doctors, and the President and First Lady for the Youth Hostel Movement has been the most important factor in causing the extension of youth hostels in America. President Roosevelt expressed his opinion on youth hosteling to the national directors of the A. Y. H. on Oct. 25, 1937, at Hyde Park, when he said, "I am all for it. . . . I was brought up on that sort of thing. . . . The more one circulates in his travels the better citizen he



Above: A hosteler presents his pass to the housemother upon arrival. At left: A fine stretch of road along West River, near Brattleboro.

ance of a leader. The cost was as low as \$300. This amount included leadership fee, round-trip steamer passage, government head tax, a bicycle or a faltboot (shared by two people) to use all summer, and food and lodging for ten weeks. A. Y. H. experiences abroad can be made at such a reasonable cost because the A. Y. H. operates on a nonprofit basis and hostelers travel with light packs, cook their own meals and live in youth hostels.

The American transcontinental Rolling Youth Hostel, first sponsored in 1937, was enjoyed by thirty young American men and women. The group, under the leadership of Monroe Smith, traveled from Northfield, Mass., through Montreal and Winnipeg, Canada, the Canadian Rockies, Vancouver, Seattle, Los Angeles, the Grand Canyon, Sante Fe and re-

becomes, not only of his own country but of the world."

A. Y. H. experiences at home and abroad are another factor causing the spread of youth hostels here. Last summer the A. Y. H. offered eleven European travel experiences under the direction of mature, trained leaders. More than 230 American youths traveled through Europe in eleven countries last summer. Each group of ten hostelers was under the guid-





Straw ticks are being filled on a working holiday at Saline Valley Farms.

turned to New York, covering about 10,000 miles. Trains were used to cover the great distances between the hostels of New England, Alberta (Canada) and California.

The group traveled in the United States on a regular day coach, but in Canada the Canadian National Railway furnished a special type of railway car, called a Rolling Youth Hostel. This car was formerly used by the Canadian National Railway to transport colonists from Montreal to the western provinces of Canada and could accommodate fifty persons. This former colonist car had separate toilet and sleeping facilities for boys and girls. The kitchen, equipped

with a coal stove, a sink and cupboard, was opposite the boys' washroom. Separate sleeping quarters were made by drawing a heavy curtain across the center of the car.

During 1937 there has been increased use of hostels by schools to supplement their programs. The ages of school pupils using the hostels in connection with school activities have ranged from 12 to 20 years. Among the schools that have used the hostels are the Bement School, Old Deerfield, Mass.; Putney School, Putney, Vt.; Alfred Plant Junior High School, West Hartford, Conn.; Lincoln School, New York City, and Mount Hermon Preparatory School, Mount

Hermon, Mass. This action by schools has greatly increased the function of hostels.

I had the good fortune to meet one of these school groups last Halloween at the Richard Schirrmann International Youth Hostel in Northfield, Mass. The group of six elementary school boys came from the Bement School and were spending the weekend bicycling with their teacher. It was a revelation to me to be washing supper dishes in a small tub (more than fifty young people were at the hostel that evening) and to have three of these boys insist on helping. Young people learn how to cooperate while youth hosting.

A teacher who spent all summer hosting with one of his pupils on the Rolling Youth Hostel trip recently said to me, "I cherish the opportunity to hostel with my pupils because it puts us in a life situation together where we have to solve real, vital, practical problems mutually, cooperatively and 'on the spot.' While hosting with my pupils I have an opportunity to live with them informally. I can establish a new bond of sympathy and friendship with them and am in a position where I can lead instead of dictate, as we teachers often must do in the classroom situation. I feel that hosting furnishes a permanent basis for learning, and that there is no better way for the teacher himself to learn about his country or any other country than by hiking and biking as hostellers do."

The development of new hostels in three new regions in the United



Preparing a meal at Putney School Youth Hostel, Putney, Vt.



Bunk room at Richard Schirrmann Youth Hostel.

States during 1937 has been a great impetus to the growth of the American Youth Hostel Movement. It is all the more significant when we remember that there must be a large demand for hostels in an area before plans are made for their establishment.

One of the most interesting of the new hostel developments took place in Pennsylvania in May and June, 1937, when Henry Woolman, who is interested in horseback trails, became absorbed with the youth hostel idea and laid the groundwork for establishing ten hostels. Mr. Woolman's work was so well done that shortly afterwards these hostels were officially opened by the A. Y. H. These Pennsylvania hostels are located along the Horseshoe Trail, and extend approximately 100 miles from Valley Forge to Manada Gap.

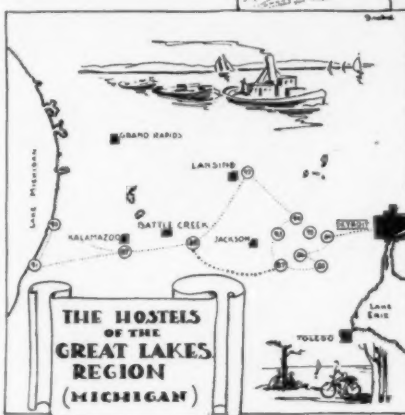
Because of an extremely pressing demand for hostels in the state of Michigan, the national headquarters of the movement in May, 1937, sent Miriam Hall, a member of the national staff, to that region. Within six weeks, twelve hostels had been established, making a chain of hostels from Ann Arbor across the state to Lake Michigan. The Michigan hostels pass through much historic country. The southern part of the loop borders on the old Sauk Detroit-Chicago Indian trail. Occasionally the hostel route crosses or runs along waterways which were constantly used by the Indians as late as 1812. Two of the hostels are located on the shores of Lake Michigan.

Hosteling in Michigan last summer proved that hosteling continues to be done on \$1 a day and less. A group of Chicago girls, under the leadership of Margo Brown, spent fourteen days hosteling from Chicago to Ann Arbor and return, and made the trip for \$10 by living cooperatively, simply and ruggedly. This cost included a round-trip boat ticket from Chicago to Benton Harbor, Mich., and food and lodging for the fourteen-day period.

Of all the new hostels to be established in 1937, perhaps the most unique are those in California. The six California hostels were set up in the spring of 1937 by Richard Silverthorn, now president of the Spanish-American Institute, Los Angeles.

They extend south of San Francisco for about sixty miles to Monterey Bay, and their trail, which passes through such unusual beauty spots as the California redwoods, is equally adapted to bicycling and to hiking. The A. Y. H. held field workers'

These maps show the development of new hostels. In California they stretch from the Golden Gate down to Monterey Bay.



training courses during 1937 for the first time, so that trained workers would be available to aid the A. Y. H. directors. Twelve persons have received certificates for successfully completing the course, and eleven more are enrolled in the second course which started Oct. 1, 1937. Major prerequisites for this course are college training, extended travel experiences, ability to meet people and to speak publicly. Not less than one-half of those who have taken the training course or who are taking the course at the present time have had experience in leading groups on extended trips either in Europe or in America.

Although the A. Y. H. did not guarantee that taking the training course meant a job, fifteen of the twenty-three persons taking the courses have found work with the A. Y. H. The expansion of the A. Y. H. staff has greatly facilitated the movement by making it possible for the work to be departmentalized.

The 1938 plans are to put eight trained workers into the field to supervise existing hostels, complete loops already established, establish new demonstration loops, speak be-



Pennsylvania is notable for its horseback trails. Michigan makes use of its many scenic waterways.

fore audiences interested in furthering the cause of youth hostels and meet with private individuals who may be of special service to the A. Y. H. The National Park Service, state and local road commissions and tourist associations are being urged to aid the A. Y. H. by helping in the mapping and public building of safe trails for hikers, bikers and horseback riders, and in publicizing the movement. The A. Y. H. will always seek the friendly cooperation of all movements having outdoor activities as part of their programs; special emphasis will be put on making more people aware of hosteling opportunities and on securing underwriting of the work. It is hoped that the American railways, following the example of the Canadian National Railway, will furnish "Rolling Youth Hostels" for a rate of 1 cent a mile to enable young people of America to travel between the hostel loops.

It will be the policy of the A. Y. H. to keep the hostels clean; to have helpful, understanding and wholesome persons as house parents; to keep the hostels open to all youth and "young people" between the ages of four to ninety-four who will "adhere to a simple and friendly mode of living"; to have a training course for A. Y. H. workers each year; to uphold the high standard of conduct in the hostels; to operate on an absolutely cash basis, and to be a non-profit, nonpolitical organization.

Atlantic City Adaptations



ATLANTIC CITY'S schools, directed by Supt. Arthur S. Chenoweth, are about what any good system is after the depression-cyclone has passed over. Only unusual features are dealt with in this report, not high spots. Many adaptations, some recent, have been made to fit the times and the locality. Experimental in the main, they are presented here as perhaps of general interest.

Attempting to fit the high school to "all the children of all the people," some modified courses and adapted work have been offered for several years. This year a new curriculum, life arts and science, has been added to the traditional courses, by Principal Henry P. Miller. Admission depends upon pupils' physical and social maturity and their need of a high school environment. If a reasonable effort results in the realization of some worth while individual or social values, the pupil is rated accordingly for diploma credit. Pupils of adequate scholastic ability and preparation are not admitted. Instructors intend to adapt the subject matter, experiences and techniques to the needs of the pupil.

Atlantic City, its chief industry entertainment, has in the summer a



Homework is the rule for these senior high school pupils. Left: Members of the industrial class give a simonizing job a final polish.

Right: Coast guardsmen and fishermen take a two-year evening school course in applied navigation which permits them to apply for a first mate's ticket.



population of one-half million people. The preparation and handling of food in hotels and restaurants offer great employment opportunities to the young men and women of the vicinity. Hence training in hotel and restaurant service is offered in the vocational schools by Director Frank R. Flower. Under an experienced chef, commercial cookery is taught at the boys' vocational school. No group is more certain of employment upon graduation than these trained cook's helpers. In the girls' vocational school a course in waitress training has been organized. So great is the demand for trained workers that it is difficult to hold the pupils in school until completion of the courses.

Atlantic City has a large Negro population for a northern city. The industries are such that there is much employment in personal service. Nearly one-third of the elementary school children in Atlantic City are Negroes. They live largely in the Northside district, and neighborhood schools have developed, effectively staffed by Negro teachers. These schools are real community centers. The principals are highly trained men with a fine sense of the needs of their people, and scholastic and social training is of a high order.

Much training in elementary composition is built around writing for publication. Self-criticism, greater concern for style and, consequently, more learning take place when writing is done for a real purpose. The *Evening Union* gives a full page every Saturday to school news writ-



The school orchestra provides music for dancing in the school gymnasium during a part of the lunch hour. This social period is under faculty supervision.



Above: Testing hearing with the audiometer in the speech clinic.



At left: An adult evening class receives training in hotel and restaurant service.

ten by children, a fine example of cooperation between the press and the schools. Most schools use this opportunity.

Many schools besides the senior high school have developed magazines of their own. The *Junior High School World* has been built into the club and homeroom programs of the school. At Massachusetts Avenue, Richmond Avenue, Brighton Avenue and New Jersey Avenue Schools, there are well developed publications. Using the Columbia Scholastic Press Association as a stimulus to this work, several children go to the annual convention in March. An examination of these magazines reveals a high quality of writing for children of the elementary school age.

Twenty-eight hundred pupils have luncheon in the cafeteria in two periods of forty minutes each. Pupil committees take the chief responsibility for supervision, with little teacher direction.

A check shows the average pupil uses from twenty to thirty minutes of the period for lunch and spends the rest of the time out of doors on the high school grounds or dancing in the gymnasium. Directed by a pupil leader, an orchestra, other than the regular school orchestra, has been

organized for dancing. This brief social period is under faculty direction and is limited to pupils of the school.

An unusual handling of corrective speech work should interest visiting superintendents. Through Dr. Alvin C. Pope, head of the New Jersey State School for the Deaf at Trenton, eight teachers of speech spend alternate week-ends (Saturday and Sunday) in Atlantic City. Their expenses are borne by the Kiwanis Club. At the junior high school they examine and train children with speech difficulties and train parents and teachers to continue practice exercises designed for each child. About sixty individual cases are carried continuously on schedule, in addition to new examinations. Several instrumental aids to hearing and some surgical treatments have been provided as a result of the clinic's discoveries.

Every city has many boys who have little academic ability or who lack interest in regular school work. They may have some mechanical inclination. The problem of what type of school will best meet their needs has led to an experiment with a sizable group at the vocational school. Here, with some academic work, the requirements of which are in keeping with the academic intelli-



Nursery school children have their own playground on the roof.

gence level of the pupils, they are given preliminary kinds of hand-work. There is ample opportunity for the boys to survey under guidance the possibilities of a regular trade course. For many boys this experience furnishes the first taste of success. Changes in attitudes, appearance and outside life testify to the value of further experiment.

For children from two to five years old from families of the lower in-

come brackets, the board of education sponsors nursery schools. The cost of teachers, nurses, a full noon meal, cod liver oil, milk and fruit juices is borne by the WPA. Public school supervisors have aided in the selection and training of teachers. The board of education supplies school rooms, heat, light and janitor service. Teachers and nurses consider the education of parents and the improvement of home conditions an essential part of their work.

Atlantic City has developed an extensive program of adult education in certain fields. There are Americanization courses, academic courses of high school level and recreation groups under WPA support, meeting at the junior high school at 7:30 p.m. Elementary school classes attended largely by Negro adults meet at the Indiana Avenue building.

Vocational schools have continued their evening trade courses and have extended them under federal grants, but only for people who are or have been employed in the particular trade. Some, as the navigation course and the class for men waiters, are especially adapted to local conditions.

During the convention schools will be open. At the administration building visitors can obtain more complete information. Superintendent Chenoweth extends the services and hospitality of the schools to the Association of School Administrators.



The editorial staff of "The Shore Line" prepares next week's copy.

"Teacher Sued for Damages"

DANIEL R. HODGDON, LL.D.

THE number of recent cases in which teachers have been sued for damages in consequence of some act committed during the performance of their teaching duties has caused considerable concern among educators.

In the past little was heard of teachers being sued for negligence while performing the duties of teaching. There probably are several reasons for this fact.

In most states boards of education are exempt from actions on account of negligence on the theory that they are sovereign powers or government agencies. They are, under this theory, immune from actions resulting from negligence of their employees and agents. The doctrine of *respondeat superior* (let the master respond for the negligent acts of his servants) did not apply.

The teacher has a triple legal personality, that of an employee of the board of education for certain purposes, that of a quasi-independent contractor for the purposes of giving instruction and that of *in loco parentis* (acting in place of the parent) while the child is under his care.

In the early part of our educational history the teacher was looked upon as an employee or agent of the board of education in conformity with the English law. The United States, however, refused to follow this doctrine and made the teacher independently liable for torts committed while in the act of teaching.

In former times teachers were thought to have such small salaries and rarely any property that it was not worth while to sue them for damages. Damages could easily be collected from the school district if a judgment could be obtained. Times have changed. Tenure has made teachers' positions more secure. Salaries are better, and there is the possibility of collecting a judgment rendered against teachers over a period of years from the salary that is definitely assured. Teachers are often in a disadvantageous position,

and would rather settle an action than go to court with it. In a few cases this attitude has been exploited to make teachers pay for medical expenses and hospital charges when they probably were not at fault.

Lawyers and parents have become increasingly conscious of the right to sue teachers. Since boards of education may not be held liable for negligence except in New York State, teachers are vulnerable individuals and are often joined in an action together with the principal of a school and the superintendent of

How teachers are legally vulnerable is told here by a lecturer on school law at New York University

schools. When the action may be dismissed as to the board, the teacher may still be held liable.

The board of education can act only as a body. It cannot be called upon to instruct in the schools. The law does not intend that boards of education shall be in school when instruction is given. It must necessarily give instruction through its teachers. The board of education cannot assume the duty to instruct and control directly the details of instruction. The duty to instruct and control school work must be delegated.

When the board of education furnishes reasonably safe material, safe tools, appliances, properly guarded machinery and other materials for instruction, its duty ceases and it is not liable for the negligence of the teacher in using these materials, or the acts of the teachers while instructing pupils. The teacher then assumes the position of a quasi-independent contractor, and strictly

speaking is not an employee of the board while instructing pupils.

The courts have said: "Some duties imposed upon the board of education may be carried out by the board without the intervention of any agent. It must provide instruction for school children. It appoints teachers for that purpose. Its duty is then performed. It does not itself teach and teachers are not the agents of the board. For that reason the board of education may not be held liable for negligence of a teacher in giving instruction or in use of material furnished by the board."¹

A teacher is liable for excessive malicious or causeless punishment, for an illegal expulsion, for the enforcement of an unreasonable or illegal rule, for false imprisonment of pupils after school hours, for unjust defamation of a pupil's character, for misstatements on reports which injure pupils unjustly, for leaving any dangerous thing accessible to a pupil, for not instructing pupils properly regarding dangerous experiments in a laboratory, for sending pupils on errands when there may be elements of danger present, for running after pupils who have run away from school because of which an accident to the pupil has occurred, for permitting pupils to use improperly guarded machinery, for negligence on the playground while supervising play, for negligence in conducting games or exercises in a gymnasium, for negligence while conducting a class to a museum, or for any form or type of actionable negligence that may occur during the course of instructing pupils.

The teacher alone is considered to be responsible on the legal theory that a teacher is not an agent or em-

¹Lessin v. Board of Education, City of New York, 247 N. Y. 503, 161 N. E. 160; Johnson v. Board of Education, 206 N. Y. S. 610; Whitcher v. Board of Education, 251 N. Y. S. 611; Long v. Board of Education, 255 N. Y. S. 719; Katterschinsky v. Board of Education, 212 N. Y. S. 424.

ployee of the board and the rule of *respondeat superior* cannot then apply.

A teacher negligently directed one of her pupils, a girl, fourteen years of age, to poke the fire and draw the damper of a stove in the room where the teacher was expected to eat her lunch. The girl's dress caught fire and she was severely burned. The teacher was found guilty of negligence.²

Where a teacher threw a pencil at a pupil who was not paying attention to the recitation and the pupil turned his head and was struck in the eyes, causing blindness, the teacher was held liable on the ground that the injury was the natural and proper result of the teacher's negligence. The teacher ought reasonably to have foreseen that a permanent injury would be the natural and probable consequence of his act.³

A teacher is liable for injuries to a pupil who was permitted to use an unguarded buzz saw or planer, or for a class left alone in a room containing dangerous apparatus.

A teacher is not liable for damages for causing injury in inflicting reasonable punishment because of some unknown constitutional weakness in a pupil.⁴

School districts are not liable for injuries to pupils received while playing games during physical education during school hours on school grounds with a teacher in attendance, but the teacher may be held liable for actionable negligence.⁵

The teacher, however, is not liable for injuries to pupils who hurt one another while playing together. Thus, there is no liability when a teacher supervises a football game and a pupil is severely injured in the course of the game. The pupil in playing the game consents to any injuries that may occur.

Teachers request pupils to run errands, to erase blackboards, to open and close windows, to carry books and many other things not associated with teaching. Teachers supervise halls, rooms, dismissals in halls and at the entrances and exits of schools. Any kind of negligence on the part of the teacher in performing these duties, which results in injury to a

pupil, may result in a court action.

Such actions as these against teachers have appeared in court recently:

A manual training teacher was sued for \$25,000 damages for alleged negligence because some molten lead spattered and burned the face of one of his pupils.

A gymnasium teacher was sued for a large sum for alleged negligence in permitting a child in a gymnasium to have a lacing needle to lace a basket ball. The child had destroyed the sight of one eye by accidentally sticking the needle in his eye.

A classroom teacher was sued for negligence when she asked a child to open a transom over the classroom door. The glass in the transom broke and injured the pupil.

A \$5,000 judgment was obtained against a principal for having a process server arrested for trespassing on school property.

Where one creates a situation which is inherently dangerous for persons who thereafter use it in the way it is intended to be used, the person from whose affirmative act the danger arises is responsible to one receiving injuries through such use.⁶

It is not negligence to fail to provide against an accident that could not have been foreseen. After most accidents it can be seen how they could have been prevented, but that does not tend to prove that accidents should have been anticipated by the exercise of ordinary care and provision made against them. It is what should have been known before and not what every one knows after the accident that fixes the liability of the teacher.⁷

Human beings in their common dealings with one another in society should be required to exercise some degree of deliberation or foresight. It would be unreasonable to require them, before doing or refraining from doing a particular act, to exhaust the field of speculation concerning every possible or conceivable consequence which might result from their conduct. One should be charged with the duty to anticipate those consequences which in the ordinary course of human experience might reasonably be expected to result therefrom, and, therefore, that he should be held legally responsible for those consequences. The rule of anticipation, of foreseeableness, is one of practical ap-

plication and not of philosophical or metaphysical speculation.⁸

Negligence is the omission to take the care, under the circumstances of the particular case, a prudent and reasonable person would take.⁹

Teachers should examine all insurance policies carefully and discover whether they are fully covered. Many of the policies offered today for insuring teachers do not sufficiently protect them against large judgments. Some of these policies have so many exemptions in them that they fail to cover actions which may be brought against teachers and other claims arising from duties imposed upon teachers by superior officers.

Grave doubt is expressed as to the power of boards of education to insure teachers for actionable negligence. It is argued that the board would have no more right to provide insurance for teachers than to provide clothes or automobiles for teachers, since such expenditure of money is not for educational purposes and not permitted under the law. There is but one case, decided in New Mexico, which permitted a board to insure teachers.¹⁰

Doubt is also expressed as to the constitutionality of a statute permitting boards of education to insure teachers, since the provisions of the constitution in many states would seem to limit expenditures of taxes for schools or instructional purposes strictly for education. This question can be answered neither in the affirmative nor in the negative until it has been tested in the courts.

Until the question of liability of boards of education for negligence of teachers is tested in the courts we cannot be sure that a statute creating such liability would be constitutional under that part of the constitution providing for education in any state.

It does not seem possible under our constitution to relieve teachers from liability of negligence for their acts while teaching. It might be against public policy to enact such class legislation, however. This subject, too, would have to be tested by court action.

²Smith v. Martin, 2 K. B. 775, Ann. Cas. (1912) A. 334.

³Drum v. Miller, 135 M. C. 204, 47 S.E. 421, Am. St. Rep. 528.

⁴Quinn v. Nolan, 7 Ohio (Dec.) 585, 4 Weekly L. B. 80, 35 cyc. 1139.

⁵Ellis v. Burns Valley School District, 18 Pacific Reporter (2d) 79.

⁶Clemens v. Benzinger et al. 207 N. Y. S. 537.

⁷Kings v. Dawson, 192 S.W. 271.

⁸City of Dallas v. Maxwell, 27 Atlantic Reporter 927.

⁹Heller v. New York, New Haven & Hartford Railroad Co., 265 Fed. Rep. 198.

¹⁰Nohl v. Board of Education, 27 N. M. 242, 199 Pac. 373, 16 A. L. R. 1085.

Saturday's Children

G. W. DIEMER

FOR a number of years Teachers College of Kansas City, Mo., has carried on a comprehensive late afternoon, evening and Saturday in-service program. This program, until three years ago, consisted largely of academic and education courses valuable to teachers for cultural and professional purposes. From fifty to seventy different courses have been offered each year for the last ten years with an average annual enrollment of more than 700 teachers and students. In connection with method courses occasional demonstrations have been given by special arrangements whereby children remained after school or returned to school on Saturday morning.

In the spring of 1933, the president of Teachers College recommended to the superintendent of the Kansas City schools and the board of education the further extension of the in-service program to include a Saturday session of the Teachers College and the Woodland Demonstration School instead of the Monday session.

The purpose of the recommendation was to provide a comprehensive demonstration program for the teachers of the Kansas City school system and increased opportunity to attend Saturday courses. The board of education approved the recommendation, provided there was no serious objection from parents of children in the demonstration school or from college students.

Pupils and Parents Approve

The plan met with hearty approval from patrons and pupils and was inaugurated the following September. The program, which has now been in operation three years, has had much favorable comment and little adverse criticism. The attendance on the part of the children in the Woodland Demonstration School is fully as good on Saturday as any other day of the week. The

children take pride in the fact that they are demonstrating for visitors and seem to feel a strong responsibility for the success of the program.

Since the chief purpose of the Saturday program has been to improve the quality of teaching in the Kansas City public school system, the plan has been carried out with the full cooperation and support of the superintendent and his staff. An advisory committee was organized consisting of the superintendent, the assistant superintendent in charge of elementary schools, the president of Teachers College who is the chairman of the advisory committee, the principal of the demonstration school, the general supervisors of the school system and the method teachers in the college. During the first year the plan was in operation this committee met once each month to discuss the program and to consider suggestions for improvement. The last two years the committee has met occasionally on call from the chairman.

All in Experimental Manner

In setting up the plan, it was recognized that the demonstration program could easily cease to be creative in its influence. If teachers came with the idea of finding patterns for teaching rather than with the idea of gaining inspiration and better methods, the plan would defeat its purpose. Recognizing this danger, every effort has been made to keep the work moving forward on a creative plane and supervisors and demonstration teachers constantly hold up before those observing the experimental manner with which the teacher should use the principles and procedures observed.

In order that there might be a clear understanding of principles under which the plan should be inaugurated and carried forward, a statement of principles was agreed upon by the advisory committee at its first

The author, now president, Central Missouri State Teachers College, Warrensburg, relates his experiences with Saturday demonstration schools as worked out in Kansas City, Mo.

meeting in September, 1933. Some of these principles are as follows:

1. The plan represents a type of creative supervision in which all who participate must have an experimental attitude.

2. Every effort should be made to keep the demonstration teacher from working under a strain. She must not feel that her professional standing depends on the results of one demonstration.

3. The success of the demonstration depends upon the four people concerned: (a) the supervisor or college faculty member requesting the demonstration, (b) the demonstration teacher, (c) the observer and (d) the pupil.

4. The supervisor or college faculty member should make clear to the demonstration teacher the purposes of the demonstration and any principles or ideas which she hopes to have demonstrated in accomplishing these purposes. She should then give such assistance as the demonstration teacher may request or as may seem advisable.

5. The demonstration teacher should feel that the demonstration is her own and that she is not expected to conform to a pattern that someone else has laid out.

6. As a result of the demonstration, all four parties to the demonstration should have made desirable growth.

7. The conference following the demonstration should be a frank discussion and evaluation of the principles and procedures demonstrated and should be participated in by the supervisor, the demonstrator and the observer. It should be kept on a high professional plane and the demon-

stration teacher should never feel that any criticism is personal.

The schedule of demonstrations and exhibits for each Saturday is made up two weeks in advance and is mailed to each school in the city and to interested persons on Monday of the week of the demonstrations. Usually, eight or ten demonstrations are given from kindergarten through seventh grade. These demonstrations have represented practically every subject and activity being carried on in elementary schools. One program (attended by 510 teachers) that may be considered typical was as follows:

Typical Demonstration Program

Grades 1, 2 and 3—Open-Air Games Made and Played by Children. Participated in by eight teachers of the first, second and third grades, including teachers of open-air classes and under the direction of the supervisor of primary physical education of the Kansas City school system.

Grade 2B—Speech: Refining Speech Habits. Demonstration given by a second grade demonstration teacher under the supervision of the head of the speech department of Teachers College.

Grade 2A—Creative Composition. Demonstration given by a second grade demonstration teacher under the supervision of head of kindergarten-primary department of Teachers College.

Grade 3B—Choral Reading. Demonstration given by a third grade demonstration teacher under the supervision of the head of the speech department of Teachers College.

Grade 4B—Sharing Folk Tales. Demonstration given by a fourth grade demonstration teacher under the supervision of the head of intermediate-upper grade education of Teachers College.

Grade 6B—The Classroom Teacher's Part in the Physical Education Program. Demonstration given by the physical education teacher for the demonstration school, using sixth grade children, under the direction of the supervisor of intermediate-upper grade physical education of the Kansas City school system.

Grade 7B—Speech: Comparative Tonal Values of Vowels. Demon-

stration given by the seventh grade demonstration teacher under the supervision of the head of the speech department of Teachers College.

Grade 7A—History: Types of Pioneering. Demonstration given by the seventh grade demonstration teacher under the supervision of the head of the social science department of Teachers College.

Art exhibit of Christmas work by various grade school pupils in the city, displayed by the art director of the Kansas City public school system.

Exhibit of games made and played by children in the primary grades and open-air classes from fourteen different schools, displayed by the supervisor of physical education for primary grades.

Exhibit of leisure-time and health activities done by the children of one of the city schools. It included (1) children's interpretations of books in posters, in clay and soap models and in construction carried out under the leadership of three teachers; (2) a large number of leisure-time projects worked out by the children at home, and (3) a number of interesting health posters worked out for the Nine-Point Buttons.

Before and After

While this represents a typical demonstration program it should be understood that the program is varied and all phases of classroom work from nursery school through the seventh grade have been demonstrated during the last three years. In addition to the scheduled demonstrations, visitors are free to observe regular classrooms in which demonstrations are not being given. Numerous exhibits from various elementary schools of the city also have been arranged. These exhibits have included practically all types of work being carried out in the elementary schools.

That demonstrations may be of greatest value, each one who attends is expected to be present at a conference beforehand at which necessary explanations are given by the supervisor. Following the demonstration, those observing are expected to stay for a follow-up conference during which a frank discussion of the lesson is led by the supervisor assisted by the demonstration teacher. The

follow-up conference is conducted in the room in which the demonstration was held, the children being sent to the playground in charge of a student teacher.

During the three years the Saturday plan has been in operation, forty-eight Saturday demonstration programs have been organized with a total of 366 different demonstrations. Ninety-one exhibits also have been arranged. The grand total attendance for all Saturdays during the three years has been 18,177, with an average attendance for each Saturday of 378.7.

Difficult to Evaluate

The evaluation of such a program becomes somewhat difficult. Since, however, no one is compelled to attend a Saturday demonstration, the unusual attendance is an indication of the values teachers are receiving from the program. The fact that large numbers of teachers are willing to devote part of their Saturdays to attendance on demonstrations indicates an unusual interest. This interest has not only been maintained through the three years but has steadily increased.

Teachers, principals and supervisors have spoken in very complimentary terms of the values of the program. Principals and supervisors are continually reporting improvements in the work of teachers who have been in attendance on demonstrations. Teachers feel that they have an opportunity to see progressive principles in education combined with sound practice. They feel, therefore, they gain practical suggestions that they can take back to their classrooms and use.

The plan has not led to standardized pattern teaching, but, quite the contrary, has stimulated an inquiring and experimental attitude and at the same time a better understanding of the psychologic principles upon which all justified experimentation must be based. The program has given the college faculty a better opportunity to evaluate its program in terms of the needs of teachers in the field and, hence, has stimulated additional study and investigation of the curriculum and program of the laboratory school for the students in the preservice program of the college.

Enrollment vs. Pupil Failures

H. M. LAFFERTY

FROM the administrative point of view the matter of pupil promotion is one of vital importance to the public school. Other things being equal, a high rate of promotion carries with it a threefold implication: (1) it denotes satisfactory work on the part of pupils; (2) it reflects the utilization of efficient teachers and successful methods of instruction, and (3) it means reduced costs of repetition.

Failure is centered around the inability of a pupil to meet the requirements set down for promotion in the several subjects constituting the curriculum of the school. Establishment of standards of promotion revives controversial problems of long standing. Immediately that enigmatic variable, "local needs" or "community differences," is manifest.

Despite, however, the lack of uniformity in affixing criteria for promotion in the various academic subjects, a study of nonprogress as it is disseminated through the offerings of the school is highly desirable. It is through such a medium that one is enabled to ascertain at what points our curriculum, as it now exists, is vulnerable, and wherein it is in need of modification or radical revision.

Numerous studies have been made of pupil failures, but few studies have attempted to suggest that the size of the school system has any appreciable influence in determining the amount of subject or grade retardation. To determine whether a greater percentage fails in mathematics in a high school in a city of from 25,000 to 100,000 population than in a high school located in a city of from 5,000 to 10,000 population, a study was made of 11,916 subject failures in fifteen senior high schools in Texas for the scholastic year 1934-35. The populations of the cities in which the senior high schools were located varied from 5,000 to more than 100,000.

In Table I is given the percentage of pupils who fail in each of the ten most common high school subjects in terms of the total number

of failures caused by these same ten high school subjects.

There is little indication that the size of the school system conditions the amount of failure in a particular school subject. All three of the largest high school groups have their greatest number of failures occurring in mathematics, English and history.

any one school subject may, in terms of the total high school subject enrollment, be relatively high and the percentage of pupil failure for that school subject correspondingly lower than for a subject having the same number of failures but possessing a smaller enrollment total.

In ascertaining the extent to

TABLE I—PER CENTS OF TOTAL NUMBER OF FAILURES DISTRIBUTED AMONG HIGH SCHOOL SUBJECTS IN TERMS OF SIZE OF SCHOOL SYSTEM (FIFTEEN SENIOR HIGH SCHOOLS)

Group*	Math.	Eng- lish	Hist.	Com- mer- cial	Science	Indus- trial	Home Eco- nomics	Latin	Span- ish	French	Pupil Total
I	B 21.64	28.59	19.95	9.79	8.91	.....¹	.....¹	3.21	7.38	0.53	3,022
	G 19.67	19.27	25.75	15.96	6.03	.....	.....	2.65	9.71	2.01	2,039
	T 20.84	24.82	22.29	11.87	7.75	.....	.....	2.98	8.32	1.13	5,061
II	B 24.08	29.47	14.75	7.26	12.06	6.44	0.51	1.72	3.67	0.04	2,562
	G 26.07	22.90	14.64	13.77	6.68	0.35	8.44	1.93	4.69	0.53	1,707
	T 24.88	26.84	14.71	9.86	9.91	4.01	3.68	1.80	4.08	0.23	4,269
III	B 30.29	27.33	15.98	6.00	9.79	0.18	.....	2.49	7.94	.....²	1,083
	G 37.12	24.75	18.28	4.17	6.33	.....	2.59	2.16	4.60	.....	695
	T 32.96	26.32	16.87	5.29	8.44	0.11	1.01	2.36	6.64	.....	1,778
IV	B 20.01	24.12	9.40	6.28	11.08	11.24	0.00	33.87	17.02	0.00	534
	G 13.75	7.60	6.03	2.34	9.80	4.17	1.36	9.63	11.40	6.25	274
	T 16.83	15.75	7.67	3.55	10.53	10.86	1.36	17.26	13.55	4.55	808

¹No data; ²not offered.

*Group I: four senior high schools in cities of more than 100,000 population.

Group II: four senior high schools in cities of population between 25,000 and 100,000.

Group III: four senior high schools in cities of population between 10,000 and 25,000.

! Group IV: three senior high schools in cities of population between 5,000 and 10,000.

In the case of the high schools located in cities with populations ranging from 5,000 to 10,000, the foreign languages tend to become serious obstacles for the pupils.

As regards sex differences, the size of the school apparently has little to do with determining whether or not more boys than girls pass mathematics or whether girls excel boys in English.

The distribution of the pupil failures among the several high school subjects does not, however, permit any justifiable conclusions to be drawn relative to the difficulty of a particular subject. The enrollment in

which the per cent of total subject failures equates with the per cent of total subject enrollment with regard to schools located in cities of varying population, Table II reveals little difference of practice.

The relation between enrollment and number of failures in any single subject is, for the most part, consistent. The only two departures of any consequence noted in Table II are: (1) in mathematics in the cases of Group III and Group II where 20.27 per cent in Group III and 18.31 per cent in Group II are enrolled in the subject, while according to Table I, 32.96 and 24.88 per cent,

TABLE II—PERCENTAGE ENROLLED IN EACH SUBJECT OF SUM TOTAL OF SUBJECT ENROLLMENTS FOR ALL PUPILS ON BASIS OF CITY POPULATION (FIFTEEN SENIOR HIGH SCHOOLS)

Group	Math.	Eng-lish	His-tory	Com-mercial	Science	Indus-trial	Home Eco-nomics	Latin	Span-ish	French	Total Subject Enroll-ment
I	17.90	29.21	21.74	12.30	9.16	....¹	2.45	5.75	5.75	1.49	37,259
II	18.31	24.64	17.70	9.63	12.17	4.66	6.48	2.56	3.50	0.35	29,879
III	20.27	25.85	20.05	7.06	10.29	1.05	4.81	2.73	7.89	....²	16,727
IV	16.52	25.81	18.21	8.92	10.26	6.50	5.30	2.84	5.32	0.32	6,940
Average	18.36	26.83	19.83	10.20	10.44	3.77	5.81	2.57	5.37	0.92	....
Enroll-ment	16,675	24,360	18,006	9,263	9,482	2,020	3,109	2,331	4,879	680	90,805

¹No data; ²not offered.

respectively, of failures in senior high school occur in that department, and (2) in English in Group I where 29.21 per cent of the total subject enrollment is concentrated, while only 24.82 per cent of the total number of high school subject failures is accounted for by this subject as indicated in Table I.

There is a slight indication that the larger the school system the more comparable is the ratio of the enrollment in a single subject to that of the total subject enrollment, and the ratio of the number of failures in a single subject to that of the total number of subject failures.

In answer to the question, "What per cent of the pupils enrolled in a particular high school subject fail in that subject during a single year?" Table III presents the percentages of high school failure in the ten separate subjects as based independently upon each subject's enrollment.

If the four senior high schools located in cities of more than 100,000 population can be taken as a satisfactory instrument of measurement, the greatest opportunity for failure in the largest high schools rests in Spanish and in Latin. In high schools located in cities of from 25,000 to 100,000 population, mathematics and Spanish, closely followed by English, head the list of most difficult subjects; while in high schools in cities of from 10,000 to 25,000 population, the three most difficult subjects are the perennial favorites, mathematics, English and Latin, in the order named.

One of the most outstanding influences exercised by the factor of

variability of size of high school is the tendency for the percentages of failures in the larger city school systems to be more equally apportioned among the ten high school subjects. If the percentage of failure incurred in any one subject is indicative of the degree of emphasis levied on that subject, the larger the high school the less the likelihood of some of the school subjects being stressed at the expense of other school subjects.

A second point of significance is that despite the fact that Spanish and Latin incur an insignificantly small percentage of the total number of high school subject failures in the largest high schools (Table I), an entirely different picture is revealed

when the percentage of failure in Spanish and Latin is computed from the net enrollment of each subject.

If the returns of these fifteen senior high schools can be taken as an index of probable trends throughout the state, large as well as small city high schools continue to use the foreign languages as formidable barriers for the pupil to hurdle.

With the largest senior high schools showing 19.64 per cent of their pupils who are enrolled in Spanish failing in that subject in a single year and showing 16.56 per cent of their pupils who are enrolled in Latin failing in that subject, much remains to be done regarding the promotion of an understanding of modern methodology of instruction and the determination of relative values in appraising the worth of the various school subjects comprising the high school curriculum.

While the limited number of city school systems involved in this study prevents the establishment of convincing conclusions, an analysis of the data which have been presented encourages one in the belief that the size of the high school, whether located in cities of 5,000 population or whether located in cities of more than 100,000 population, carries comparatively little weight in predicting what subjects cause the greatest percentage of failure.

TABLE III—PERCENTAGE OF SUBJECT FAILURES ACCORDING TO ENROLLMENT WITHIN THE SEPARATE SUBJECTS IN SCHOOL SYSTEMS OF VARYING POPULATIONS (FIFTEEN SENIOR HIGH SCHOOLS)

Group		Math.	Eng-lish	His-tory	Com-mercial	Science	Indus-trial	Home Eco-nomics	Latin	Span-ish	French
I	B	18.07	16.09	15.01	18.25	13.47	....¹	....¹	22.10	22.21	15.53
	G	13.15	7.11	12.86	10.29	8.68	....	....	11.42	17.37	9.07
	T	15.82	11.54	13.93	13.11	11.48	....	....	16.56	19.64	10.27
II	B	21.79	20.61	14.36	17.42	14.23	12.48	8.90	12.12	20.98	3.70
	G	16.88	10.57	9.41	12.98	7.79	8.45	8.04	8.21	13.36	11.84
	T	19.42	15.56	11.87	14.63	11.64	12.28	8.11	10.07	16.62	9.71
III	B	18.54	13.88	10.23	11.32	11.01	1.14	0.00	13.78	14.38	....²
	G	15.91	7.85	7.64	4.78	5.80	0.00	2.23	5.75	4.44	....
	T	17.28	10.82	8.95	7.96	8.72	1.14	2.23	9.19	8.95	....
IV	B	20.01	24.12	9.40	6.28	11.08	11.24	0.00	33.87	17.02	0.00
	G	13.75	7.60	6.03	2.34	9.80	4.17	1.36	9.63	11.40	6.25
	T	16.83	15.75	7.67	3.55	10.53	10.86	1.36	17.26	13.55	4.55

¹No data; ²not offered.

Linking a School by Loud-Speaker

HOWARD F. SHOUT

SINCE its development into a departmental institution of many rooms, the secondary school has lacked unity. Some approach to unity has been achieved in the school assembly, through the newspaper, in athletic contests and in systems of pupil government. All these, however, have resulted in partial or spasmodic group feeling. Until recently some medium through which the administration could work out its problems in cooperation with the school population, through which the faculty and pupils and the pupils themselves could achieve a closer harmony and through which departments might work together toward educating the whole child, was needed badly. That medium has been discovered. The school has found

its voice in the public address system.

Jefferson Intermediate School, Detroit, has a complete public address and receiving unit with some sixty loud-speaker outlets in all rooms of the building. Two phonographs are used, one for feeding directly into the system and another for sound effects and incidental music. Two microphones, files of scripts and records giving sound effects complete the equipment.

The pleasures and values derived from this set-up range from administrative convenience to the correction of speech defects, and from formal instruction to pupil variety broadcasts. Most of the direct values are listed below. Others come as in-

cidental and by-products of individual activities.

Through the public address system the administrator is in close touch with all parts of the school at all times. Announcements, special arrangements of school procedure, health and safety notices, are only a few of the conveniences for the school executive. When the administrator wishes to notify a group, the members of which are scattered throughout the building, the public address system gives immediate service. When an emergency occurs, a fire or other accident, the pupils may be centrally controlled. Probably most important is the personal and direct way by which the school executive is able to deal with the teachers and pupils through this medium. The public address system brings all that is valuable on the radio sched-

Over the air the pupil guild presents a stirring drama, "Safety Musketeers."



ule of the day straight into the classroom. Many valuable series of educational broadcasts are made available to the teachers. Outstanding are the offerings of the American and Ohio Schools of the Air, the music appreciation series conducted by Walter Damrosch, and, locally, the broadcasts of the Detroit Public Schools over facilities of city broadcasting stations. Added to these may be such programs as Dr. Joseph L. Maddy's band lessons, broadcasts of the Detroit board of health, the series of talks given by Doctor Dafoe and Albert Payson Terhune, the U. S. navy, army and marine band programs and a number of excellent newscasts.

Special features make the world picture a real one for pupils in their classrooms: the inauguration of our president, the coronation of the British king, national education programs from Washington, a broadcast from a Detroit courtroom and the senate judiciary committee in session. These must be scheduled in advance and made available to the teacher if she finds them useful in her work or in the general education of the child. Teaching made possible by this

means is supplementary to the work of the regular teacher and adds color and depth to the classroom. Radio drama may bring history to life; current events broadcasts will make social science real; dramatizations of great works of literature bring new understanding to the pupils' minds. Then, too, certain elements of the learning experience can be carried on in groups. Certain speech errors common to large numbers of pupils may be remedied. In addition, each teacher may have some special subject to share with all the pupils. They should have the benefit of that teach-

er's special ability and knowledge.

The teachers at Jefferson Intermediate School have cooperated in giving daily newscasts prepared for pupils' interest levels and understanding. The teachers join in informal round table discussions on problems of social or political significance, and the pupils listening in are privileged to hear mature opinions on all sides of each question. Drill and explanatory lessons on common speech errors have been given. A vocational series with particular reference to local conditions is being developed.

Lessons have been given with such



Radio round table, showing teacher and pupil group.



Principal A. M. Cotter makes use of the loud-speaker in an emergency.

titles as "Some Interesting Letters of Great Men and Women," "The Dictionary Come to Life," "Population, and What It May Mean to You" and "The Three Qualities of Good Expression." How some of these might give background and motivation for classroom work is obvious. Lives of great poets and the interpretation of some of their works by readers and the glee club have made up another group of lessons.

The teachers at Jefferson also have achieved a closer unity with the pupils by the presentation of faculty variety broadcasts. These are an expression of their talents in entertainment and comedy and are paralleled by pupil variety broadcasts.

The possibilities of the public address system in the development of

a good speaking voice and manner in the pupil are apparent. Participation in school broadcasting is of extreme value, but other techniques lead more directly to the same end. For example, a class or group of classes may prepare brief talks and the individuals may present these in turn over the public address system to the class or to other classes taking part in the activity. The listeners will evaluate the talk and the manner of presentation. Before the pupil is ready for the test he must drill himself on pronunciation and expression.

A variety of pupil activities are involved in the use of the public address system. Our Jefferson Radio Guild is organized primarily with the study of radio in mind but the in-school aspects of the work have now far exceeded the out-school. The eight departments of the Guild produce worth while programs for the benefit of other pupils. The eight groups are script writing, microphone (speaking and acting), production (casting and presentation), music, control engineering (handling the control unit of the system all through the day), sound effects, publicity (advertising in-school programs) and appraisal. The Guild has presented many programs for special occasions, as series of dramatizations and safety dramas.

Pupils have given round table discussions on problems particularly significant to their minds as "The Development of Personality," "What to Expect in High School" and matters of school conduct.

The public address system is an opportunity for parents to make their influence felt in the school. Many who would hesitate to appear in an assembly program will take part in a microphone program. There are many community and home problems that they can discuss with one another or with pupils while the school listens in. Many parents have special knowledges or abilities which pupils would enjoy hearing, and others may have entertaining talents to add variety to the program. A parents' group also may present short plays. This brings the home and neighborhood influence into the school and promotes understanding between pupils and parents.

There are two aspects to the use of

a public address system for vocational guidance. First of all, radio is becoming one of the most important fields of endeavor in our modern world, and workers must be trained for it. That is the school's job. The public address system offers a practical laboratory for such training. At Jefferson the Guild meets in regular classes for instruction in radio, aside from the actual experiences of in-school broadcasting. Second, the public address system may be used for the dissemination of vocational information concerning local situations.

A series of in-school broadcasts on job-seeking and job-keeping, coupled with an investigation of the requirements and possibilities of a number of types of occupations, is valuable. Since this is applicable to all the pupils, it may be given in a uniform way. The parents may be called in to tell their experiences in certain occupations.

Speech defects are magnified many times by the microphone. Flaws may be detected much more easily than by other means and treatment prescribed with more success. The public address system offers a power-

ful motivation to speech improvement. Parts in in-school broadcasts may be found for those who succeed in correcting their defects. This is sufficient reward for the most wearying hours of drill.

The close personal contact that may be made by the administrator with the pupils through this medium has been indicated. This is but a part of the service of the public address system in making the school more human. For example, an appropriate verse or statement on each teacher's birthday creates a friendly feeling. A mention of pupils who are seriously ill or injured is another. New pupils may be welcomed through the loud-speaker. Rivalry in gaining high citizenship marks or records in attendance and promptness is stimulated between classes by comparative ratings announced weekly. There is almost no limit to the possibilities in this direction.

Thus, the school has found a voice, a medium through which the pupils and teachers may come together. The public address system serves the school as communication systems have served cities and nations. It helps to create a democratic spirit.

Machines in Teaching

THE use of modern machines in making today's teaching more effective was a recurring topic at the annual meeting of the National Council of Teachers of English. "We will not intrust our lives to dentists, hospitals, and physicians who do not keep pace with modern science," Holland D. Roberts of Stanford University and Menlo School and Junior College said in his presidential address. "Should not teachers command the respect of pupils and public by using the latest efficient means of carrying on their work?"

Professor Roberts described a conversation conducted over short-wave radio between Menlo School and the Aberdeen (Wash.) High School with the use of a portable transmitter costing \$125. He prophesied that at the present rate of progress, pupils would soon be able to communicate with children on other continents.

The creation of innumerable speech situations for the classroom with modern electrical equipment was discussed by Harlen M. Adams of Menlo School and Junior College, who was made chairman of a council committee on mechanical devices in the classroom. He demonstrated classroom uses of a recording machine, a public address system, inter-room communication equipment and a dictating machine.

How the phonograph can enrich teaching was the subject of a demonstration by George W. Hibbitt of Columbia University.

Dr. Stella S. Center, director of New York University Reading Clinic, described the machines that are being used in diagnosing and remedying reading difficulties. She forecast the establishment of reading clinics in school systems and individual schools in the near future.

Rating School Board Members

DENNIS H. COOKE and QUILL E. COPE

THERE are approximately 500,000 school board members in the United States who are duly elected by the people of their respective constituencies to safeguard the community's interest in the schools. In short, school board members, in keeping with statutory provisions, control the destinies of the public schools in this country. Notwithstanding the importance of the board member's responsibilities, few studies have been made of the qualities, characteristics and experiences that make good school board members.

Development of methods of improving the qualifications of the school board members who are now in control, those who are now seeking office and the legions of those who will aspire to the office is a real problem. Regardless of their qualifications the board members now in office, in the absence of a serious breach of conduct, will likely remain so throughout their terms of office. They may, however, become even better board members if a satisfactory rating scheme, on which they may analyze their own inefficiencies and abilities, is given them and they are urged to rate themselves thereon. Only by knowing our limitations is it possible to overcome them.

Distributed to Voters

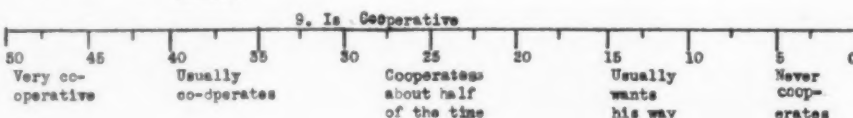
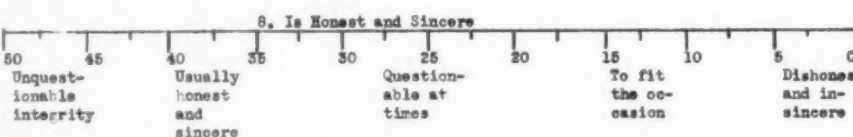
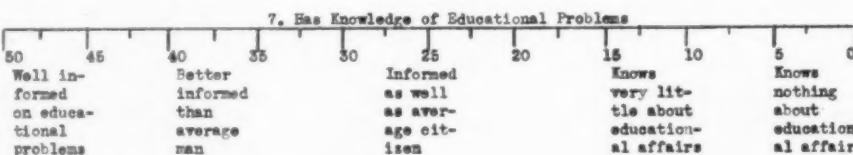
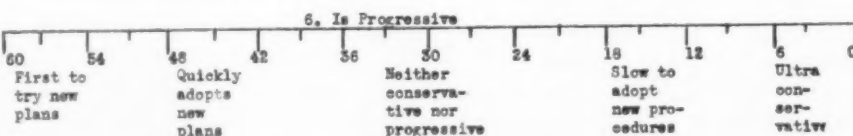
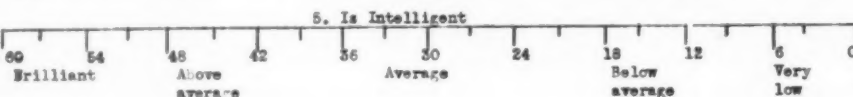
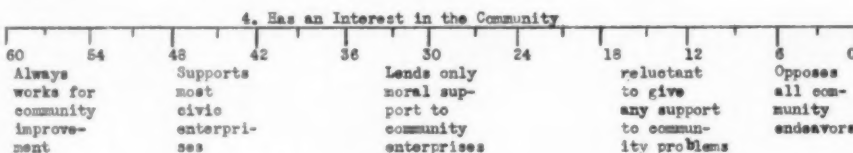
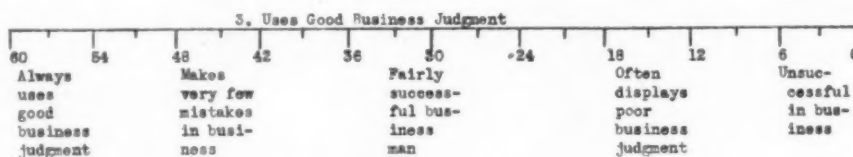
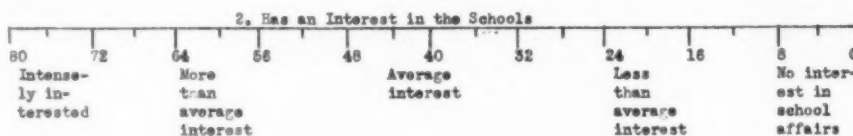
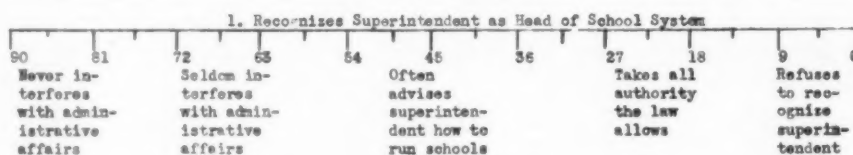
Distribution of such a scale to the voters in any community at a time when there is no school board election pending might prove sufficiently educative that only capable board members would be elected to office. A continuation of this and other educative procedures over a period of years might encourage only the most potential board members to seek office. Since superintendents are constantly faced with the problem of educating board members in school procedure as new boards evolve and old ones dissolve, the following rating scale for board members is offered in an effort to facilitate the process.

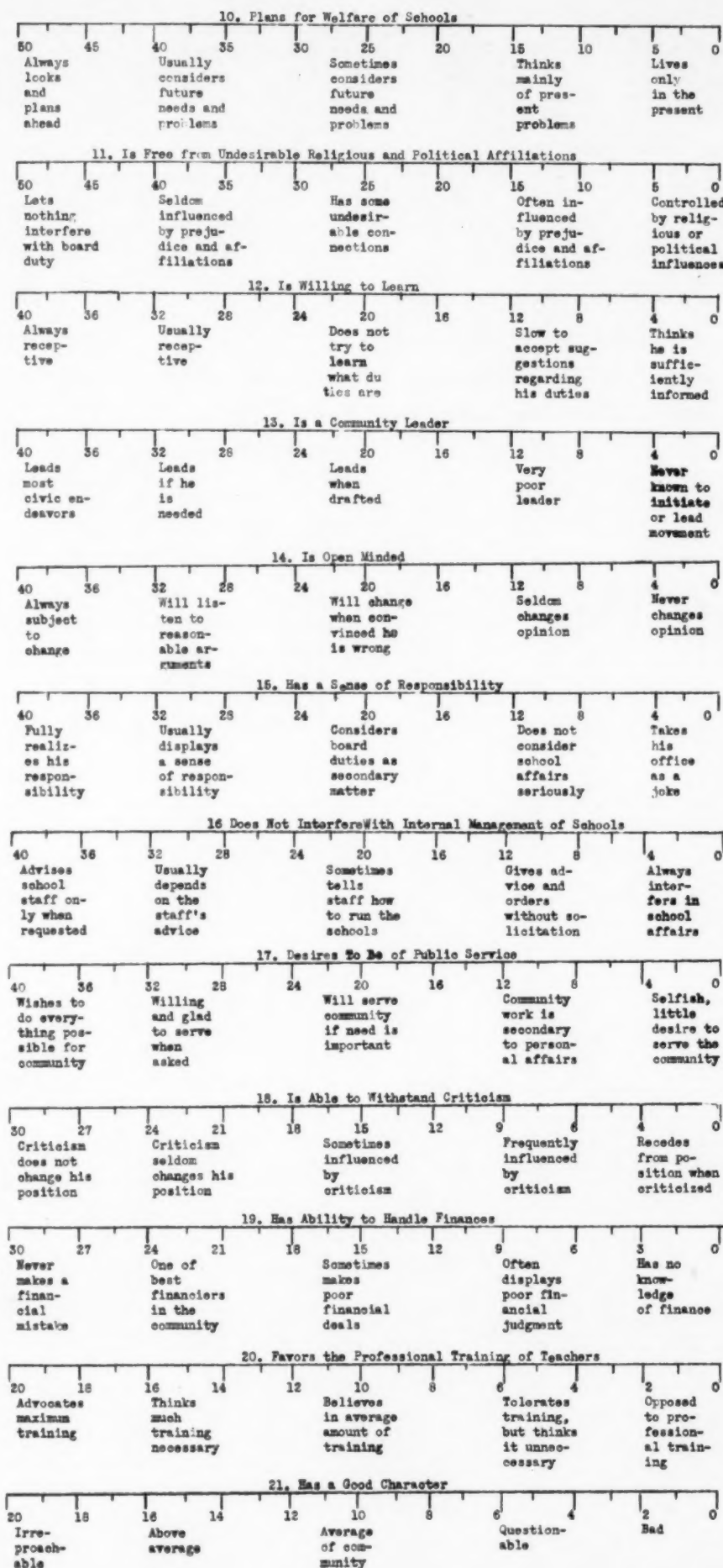
Rating Scale for School Board Members

Below are listed 21 characteristics that county school board members should possess. Put a check (✓) on each line at the place you think fits the particular member. Each board member should check himself on each item at the place he thinks is correct. Then the 21 separate scores should be totalled. The total maximum score is 1000, while the total minimum is 0.

Name of Board Member _____ Address _____ Score _____

Name of Rater _____ Official Position _____ Date _____





A diligent study of all available publications concerning the traits that school board members should possess resulted in a list of forty-two traits or characteristics which were proposed by forty-nine authorities in school administration. These traits are listed in Table I, which appears on the next page, in the order of frequency of occurrence. From this table it will be observed that a frequency of 35 for the first characteristic is 9.9 per cent of the total 351 frequencies; for the second trait 25 is 7.1 per cent of 351, and so on. Since it was desired to construct the scale on the basis of 1,000 points, each of the percentages in column two of Table I was multiplied by 10.

Superintendents' Opinions

As a second step the forty-two traits were listed, in random order, on a check list and mailed to forty-nine* of the most successful superintendents in Tennessee. In no case was the same person used both as an authority and a superintendent. Each of these superintendents assigned a value of 42 to what he considered the most important one of the forty-two traits and 1 to the least important trait. Then the values assigned to each trait were totalled. For example, the superintendents gave a total of 1,019 points to the first characteristic in Table I, and so on. This number is 3.2 per cent of the total points (32,300) given to all the traits. In order to reduce the percentages to a 1,000-point scale each was multiplied by 10.

It is obvious from Table I that the authorities and superintendents are rather closely agreed as to what are desirable characteristics of good school board members. In fact the coefficient of correlation between their rankings (columns three and six) is $.744 \pm .048$. On the whole, there was, however, more agreement among the authorities than among the superintendents regarding the relative importance of the characteristics.

To obtain a composite scale of points the value assigned to a particular trait by the authorities was averaged with that assigned to it by

*Forty-nine superintendents were chosen to match the forty-nine authorities quoted in the publications.

Table I—Desirable Characteristics of School Board Members

Characteristics	Proposed in Publications			Ranking by Superintendents			Average Points
	Number	Per Cent	Points on Scale	Total Points	Per Cent	Points on Scale	
Recognizes superintendent as head of school system	35	9.9	99	1019	3.2	32	66
Has an interest in the schools	25	7.1	71	1133	3.5	35	53
Uses good business judgment	19	5.4	54	1100	3.4	34	45
Has an interest in the community	18	5.1	51	1221	3.8	38	45
Has knowledge of educational problems	16	4.6	46	955	3.0	30	38
Is progressive	15	4.3	43	1201	3.7	37	40
Is intelligent	14	4.0	40	1433	4.5	45	43
Is free from undesirable religious and political affiliations	14	4.0	40	764	2.4	24	32
Is honest and sincere	12	3.4	34	1244	3.9	39	37
Plans for welfare of schools	12	3.4	34	1019	3.2	32	33
Is cooperative	12	3.4	34	1087	3.4	34	34
Is a community leader	12	3.4	34	827	2.6	26	30
Is willing to learn	11	3.1	31	924	2.9	29	30
Has ability to handle finances	10	2.9	29	574	1.8	18	24
Has a sense of responsibility	9	2.6	26	1020	3.2	32	29
Is open-minded	9	2.6	26	1016	3.2	32	29
Does not interfere with internal management of schools	9	2.6	26	929	2.9	29	28
Is able to withstand criticism	9	2.6	26	651	2.0	20	23
Desires to be of public service	8	2.3	23	1014	3.2	32	28
Knows teachers	7	2.0	20	511	1.6	16	18
Is persistent	6	1.7	17	567	1.7	17	17
Is frank with community	6	1.7	17	660	2.1	21	19
Makes no promises	5	1.4	14	374	1.2	12	13
Is not domineering	5	1.4	14	604	1.2	12	13
Has children in school	5	1.4	14	294	.9	9	11
Devotes time to school work	4	1.1	11	714	2.2	22	16
Is fearless	4	1.1	11	550	1.5	15	13
Favors professional training of teachers	4	1.1	11	997	3.1	31	21
Is courteous	4	1.1	11	595	1.9	19	15
Has ability to get things done	4	1.1	11	806	2.5	25	18
Is loyal to associates	4	1.1	11	529	1.6	16	13
Is good natured	4	1.1	11	418	1.3	13	12
Respects rights of others	3	.9	9	821	2.6	26	17
Has good character	3	.9	9	1032	3.2	32	21
Has sense of justice	3	.9	9	762	2.4	24	14
Is punctual	2	.6	6	253	.8	8	7
Is patient	2	.6	6	448	1.4	14	10
Instills confidence	2	.6	6	641	2.0	20	13
Has broad interests	2	.6	6	694	2.2	22	14
Is cool under fire	1	.3	3	385	1.2	12	8
Observes parliamentary law	1	.3	3	136	.4	4	3
Has self-confidence	1	.3	3	388	1.2	12	7
Total	351	100	1,000	32,300	100	1,000	1,000

the superintendents. For example, the authorities assigned 99 points out of 1,000 to "Recognizes superintendent as head of school system," while the superintendents allotted 32 points to this characteristic on the same basis. The average of these values is 66. Each of the forty-two traits was treated similarly. The average points are shown in the last column of Table I.

Twenty-One Traits Listed

Since a list of forty-two traits was finally considered too long it was decided to use the twenty traits with the largest number of average points. Since the twentieth and twenty-first traits tied in average points, 21 each, both were included in the final scale. In view of the fact that the total average points assigned to these twenty-one traits is 729 out of a possible 1,000, this procedure was considered satisfactory. The method by which the final values were determined may be seen by a study of Table II.

From this table it will be observed that 66, the average number of points for the first characteristic, is 9.1 per cent of the total average points (729). By multiplying the percentages in column two by 10 the values in column three are obtained. In order to depict the scale for each of the twenty-one characteristics in ten equal parts, final values which were multiples of 10 were assigned to the traits. In most cases the nearest multiple of 10 was assigned to each of the obtained values. For example, 91 was assigned 90, 75 was given 80, 63 was assigned 60, and so on throughout for each characteristic.

Table II—Method of Assigning Final Values to Characteristics

Characteristics	Average Points	Per Cent	Obtained Points	Assigned Points	Characteristics	Average Points	Per Cent	Obtained Points	Assigned Points
1. Recognizes superintendent as head of schools	66	9.1	91	90	11. Is free from undesirable religious and political affiliations	32	4.5	45	50
2. Has an interest in schools	53	7.5	75	80	12. Is willing to learn	30	4.1	41	40
3. Uses good business judgment	45	6.3	63	60	13. Is community leader	30	4.1	41	40
4. Has an interest in the community	45	6.3	63	60	14. Is open-minded	29	4.0	40	40
5. Is intelligent	43	6.0	60	60	15. Has sense of responsibility	29	4.0	40	40
6. Is progressive	40	5.7	57	60	16. Does not interfere with interior management of schools	28	3.8	38	40
7. Has knowledge of educational problems	38	5.2	52	50	17. Desires to be of public service	28	3.8	38	40
8. Is honest and sincere	37	5.1	51	50	18. Has ability to handle finances	24	3.3	33	30
9. Is cooperative	34	4.7	47	50	19. Is able to withstand criticism	23	3.3	32	30
10. Plans for welfare of schools	33	4.6	46	50	20. Favors the professional training of teachers	21	2.3	23	20
					21. Has a good character	21	2.3	23	20
					Total	729	100	1,000	1,000

Sensible Grading System

DON HARRINGTON

SCHOOL marks have been the symbols of success or failure to generations of pupils who have struggled with the problems and tasks of the schoolroom. Parents have accepted these symbolic reports without protest, and have praised or blamed the child accordingly. In recent years school people have begun to question the validity of these marks, and ask not only if we are attaching too much importance to them but if many children are not being hurt by their use.

The bulletin entitled "The Importance of the Marking System," published by the National Survey of Secondary Education, indicates that two-thirds of the schools studied have changed their marking systems during the last ten years, but, in spite of this, little has been done to correct the evils of the system.

In general, the five-point scale is used, but with little uniformity as shown by the survey in which 100 different marking systems are used in the 258 schools studied. There seems to be an aimless search for a system that will correct the evils and yet cling to the custom of ranking children on a basis of school achievement.

Facing these facts and believing that the present system was detrimental to the welfare of the children, the teachers of the elementary schools, Albion, Mich., developed a card that seemed to avoid the evils of the old card and yet give a clear, definite report to the parents.

We conceived the function of the report card to be twofold. The first purpose is to make a clear statement of the general status of the child in regard to his school work. This is expressed by reporting him "satisfactory" if he is making some improvement as shown by daily work and has a spirit of cooperation with the group. If, in the judgment of the teacher, the child is not doing as well as his ability justifies, he is marked "unsatisfactory."

We wish to keep in mind the fact that these marks have no bearing

The superintendent of schools, Albion, Mich., describes the grading system that has been in use with marked success for three years in the elementary schools and for two years in the junior high school of that city

on promotion. A child is promoted when, in the judgment of the teacher, he is capable of doing the work of the next grade.

The second phase of the report attempts to call definite attention to what seems to be fundamental in the child's work. A few definite objectives are set up for the year's work, and if the child is deficient in any of these it is indicated so that the parent may know definitely the things in which he needs help. We believe it is not sufficient to tell the

Pupil's Name _____						
School _____						
Chart Of Individual Attainment						
Habit Or Skill	Report Period					Remarks
	1	2	3	4	5	
1. Sharing						
2. Courtesy						
3. Cleanliness						
4. Care of material						
5. Lip reading						
6. Oral reading						
7. Comprehension reading						
8. Rate of reading						
9. Word recognition						
10. Correcting language errors						
11. Legible writing						
12. Correct spelling						
13. Applies his knowledge						
14. Number facts						
15. Fundamental operations						
16. Reasoning						
17. Independent work						
18. Appreciation of music						
19. Participates in music						
20. Learns music symbols						
21. Attractive things						
22. Originality in expression						
23. Appreciation of artistic						

Teachers' record card for the individual classifies twenty-three habits or skills.

parent the child is failing, but that the parent and child should be told specifically in what respects he is failing and what he must do to correct the failure.

We have devised a report for the first three grades that indicates only whether the child's work is satisfactory or unsatisfactory. If it is unsatisfactory, an explanation accompanies the report. This report is given out only twice a year as we do not wish to make these primary children conscious of marks and grades. We do not issue promotion reports until the child is ready to leave the third grade. A second card is used in the fourth, fifth and six grades as described above.

To aid parents in cooperating and to give them an exact idea of the

Albion Public Schools			
Pupil's Elementary School Home Report			
19____ 19____		Semester_____	
Name_____		Grades 4-5-6	
Room_____		School_____	
	Quality of Work	1-2 Days Absent	Times Tardy
First Period			
Second Period			
Third Period			
Parent's Signature _____			
First Period			
Second Period			
Third Period			
Explanation			
A pupil is marked satisfactory (S) when, in the teacher's judgement, he is doing as well as he is able. He is marked unsatisfactory (U) if, in the teacher's judgement, he is not doing as well as he is able.			
Don Harrington, Superintendent. (Over)			

The elementary school home report has on the reverse side a rating card for twenty-three specific achievements.

generally accepted habits and skills that we believe should be emphasized for the children in the intermediate department these objectives are listed on the back of the pupil's elementary school home report card.

Grade in School _____ **JUNIOR HIGH SCHOOL** Home Room Report In Citizenship

Name of Pupil _____

TEACHER	1ST PERIOD	2ND PERIOD	3RD PERIOD	REVIEWS	SEMESTER
PARENTS INITIALS					

5—Satisfactory—Shows a spirit of cooperation in all the activities of the home room. Is considerate of the rights of others during the study periods. And dependable and trustworthy when thrown upon own responsibility.

U—Unsatisfactory—Lacking in the above qualities.

ALBION JUNIOR HIGH SCHOOL HOUR _____

GRADE IN SCHOOL _____ SUBJECT REPORT _____

NAME OF PUPIL _____ SEMESTER _____ YEAR _____

TEACHER	1ST PERIOD		2ND PERIOD		3RD PERIOD		REVIEWS		SEMESTER	
	ACH' MENT	CIT' SHIP	ACH' MENT	CIT' SHIP	ACH' MENT	CIT' SHIP	ACH' MENT	CIT' SHIP	ACH' MENT	CIT' SHIP
SUBJECT										
PARENT'S INITIALS										

EXPLANATION: If the student is doing his work as well as the teacher feels his ability justifies he is marked as S-Satisfactory, if not U-Unsatisfactory. On the reverse side of the card is a list of specific achievements. Those in which the pupil excels are marked plus; those in which he is deficient are marked check. When no mark is made work is satisfactory.

GENERAL HOME ROOM CHECK

1	2	3	Rev. Sem.

Applies himself well during study periods.

Is courteous and considerate of others.

Is punctual and regular in attendance.

Is trustworthy and dependable when teacher is out of room.

Is willing and cooperative with home room activities.

Separate report cards were devised for the different groups of studies in the junior high.

Periods				Desirable Achievements
1st	2nd	3rd	Rev	
				English - Latin - Social Science - Mathematics - General Science
				Prepares assigned work and takes part in class discussion
				Tests show ability to retain essentials
				Applies the things learned to new situations, sees relationship.
				Good study habits.
				Written work well organized, accurate, neat, legible, correct spelling
				Reading up to requirement in rate, range, and comprehension.
				Vocabulary. Definite growth evident.
				Contributes to the class worthwhile material projects, talks, notebooks. Does creative thinking.

Thus parents are better able to judge and estimate the progress being made and marks have more significance.

The list includes twenty-three specific habits and skills. Those in which the child excels are marked plus and those to which the child needs to give special attention are checked. When no mark is given the habit needs no special attention. Parents are asked to go over the card carefully with the child and help him to overcome his difficulties.

Classifies Desirable Traits

Among the citizenship and community traits listed as desirable are: (1) tries to do his share in the group, (2) shows consideration and courtesy toward others, (3) conforms to standards of health and cleanliness and (4) is thrifty and careful in the use of material and time.

Skills in reading and language to be emphasized are: (1) ability to read without lip movement, (2) to be able to read orally in a pleasing manner, (3) to understand material of appropriate difficulty, (4) to read as rapidly as the average pupil in his grade, (5) to master new words for himself, (6) to try to correct the most common errors in language, (7) to write legibly, carefully and accurately about his own experiences, (8) to give attention to spelling and (9) to apply his knowledge in the understanding of new situations.

In checking required ability in arithmetic the child should be able

to: (1) learn the number facts in his grade, (2) have speed and accuracy in fundamental operations, (3) reason correctly about problems and (4) work independently.

Enough skill should be developed in art and music for the child to: (1) recognize and appreciate good music, (2) participate in music exercises, (3) learn to use music symbols, (4) try to make and preserve attractive things, (5) express his own ideas with different materials and (6) have an appreciation of the artistic in his environment.

It was necessary to devise separate report cards for different fields in the junior high school because we could not devise a satisfactory set of criteria that would fit all subjects. In addition to these three report cards a teacher's record card is used on which a record is kept of the report given out on each child for each of the six report periods. The permanent records are marked at the end of the year "passed" or "failed," and this seems to meet all needs.

Provides a Definite Goal

So that the junior high school pupil may have something definite to aim for, the report cards for these grades also list desirable achievements. For example, on the card for shop work appears a list of these desirable qualities, together with places for checking: (1) completes projects promptly, (2) measures up to the standard of his grade in quality of mechanical

work, (3) masters fundamental principles and operations, (4) applies things learned to new situations, (5) has good habits of work, gives attention to directions and assistance given and (6) is careful with supplies and materials.

Everyone Seems Satisfied

A premium is placed on the qualities of responsibility and diligence. In art and homemaking, for example, the pupil is expected to be careful in the preparation of assignments and in the following of directions, to acquire good habits of work, to give attention to directions and have his written work well-organized, neat and legible. He also is expected to acquire a vocabulary of the subject and to contribute to the class worthwhile material, projects, talks, posters and notebooks. He also should have grown in art appreciation.

These cards have been used for three years in the elementary schools and two years in the junior high school, and we are having many requests to extend their use to the senior high school. The teachers are well satisfied and have no desire to return to the previous system. The slow child has been freed from the stigma of low marks; the bright, nervous child has continued to do good work, but has been freed from the strain of securing an "A" grade. The unwholesome spirit of competition has disappeared, and everyone seems surprisingly well satisfied.

Workmen's Compensation for School Employees

M. M. CHAMBERS

CASES in which teachers and other school employees are injured while in the performance of their duties occasionally give rise to litigation under workmen's compensation laws.¹

The most recent case reaching a state supreme court occurred in Nevada. Here a teacher was injured by falling while walking to school in the morning at the usual time. The accident occurred a short distance outside the school grounds, and the evidence indicated that at the time the teacher was observing some pupils engaged at play on and near the school yard.

Recent Nevada Case

A Nevada statute expressly requires that school teachers "hold pupils to a strict account for their conduct on the way to and from school, on the playground and during any intermission." By virtue of this statute, said the court, an injury received by a teacher while engaged in observing the conduct of pupils is sustained in the course of duties, and is compensable.²

The general rule under workmen's compensation laws is that an employee cannot be compensated for an injury sustained while en route to or from his place of employment, except upon call from his employer to perform some special duty at some unusual time. Under this rule the teacher in the foregoing case would not have been compensated had it not been for the fact that the statute regarding the oversight of pupils' conduct causes the teacher's duties to extend beyond the school hours and beyond the school property.

The Nevada case is almost exactly parallel to an Idaho case of 1933.

¹Chambers, M. M.: The Application of Workmen's Compensation Laws to Teachers and School Employees, *American School Board Journal* 86:20-21 (June) 1933; and "Workmen's Compensation for Teachers Injured en Route to School," *Ibid.* 91:32, 62 (Oct.) 1935.

²*Nevada Industrial Commission v. Leonard et al.* (Nev.) 68 P. (2d) 576 (1937).

Idaho has a statute similar to the Nevada law quoted above. Thus it seems that, because the teacher's duties may follow her while en route to or from school, she may be compensated for injuries incurred then, if the circumstances indicate that she was engaged in school duties at the time of the accident.³

Although workmen's compensation acts often cover employees of the state and of its local governmental subdivisions, they do not apply to public officers who serve by virtue of appointment or election and not under contract. Thus it sometimes becomes necessary for the courts to distinguish between an officer and an employee of a public school district. In a recent Indiana case the full-time secretary of the board of school commissioners of the city of Indianapolis was held to be an employee and not an officer, and therefore entitled to compensation for an injury sustained in the course of his employment.⁴

Law Covers Accidents

In Illinois the workmen's compensation law automatically covers some, but not all, school accidents, because it applies to any "enterprise in which statutory or municipal ordinance regulations are imposed for the regulating, guarding, use or placing of machinery or appliances for the protection and safeguarding of the employees or the public therein." Hence a manual training teacher in a township high school who was injured by an unguarded circular saw while instructing a pupil was entitled to compensation. The manual training room was held to be a "work-

³*Logue v. Independent School District No. 33, Ada County, et al.*, 53 Idaho 44, 21 P. (2d) 534 (1937).

⁴*Reissner v. Board of School Commissioners of the City of Indianapolis, (Ind.)* 4 N.E. (2d) 581 (1936).

Although workmen's compensation laws cover some school accidents, steps should be taken to simplify and clarify the bearing of these statutes upon the schools, according to the author, a school law specialist

shop" within the meaning of a statute governing the location and guarding of power-driven machinery in any "factory, mercantile establishment, mill or workshop."⁵

Likewise, a school janitor who was killed by a fall while washing a second-story window of a school building which was heated by a steam boiler subject to city inspection was within the protection of the workmen's compensation law. This case included an additional interesting feature. The widow died before the award was made. Her right to compensation was extinguished by her death, but her estate was entitled to the aggregate of the specified weekly payments accruing between the time of her husband's death and her own demise.⁶

Under the Illinois statute an employee is not automatically entitled to compensation for injury or death unless it is shown that he was engaged in work coming within the statutory definition of "extrahazardous" employment. No compensation

⁵*Board of Education of High School District No. 502 v. Industrial Commission et al.*, 301 Ill. 611, 134 N.E. 70 (1922).

⁶*East St. Louis Board of Education v. Industrial Commission et al.*, 298 Ill. 61, 131 N.E. 123 (1921).

was allowed for a janitor killed by a fall while trimming a tree on the school grounds during the summer, because he was not literally in or on the school building, and the evidence did not even prove that the building itself contained any boilers or machinery that would have brought it within the statute.⁷

Similarly, a janitor who sustained an injury to his hand while cutting grass on the schoolhouse lawn with a hand mower, resulting in the loss of two fingers, was denied compensation because he did not show that the work was within the meaning of the foregoing statute, or covered by another section which includes "erecting, maintaining, removing, remodeling, altering or demolishing any structure." The court remarked that if mowing the lawn were construed as an essential feature of "maintaining" a school building, then the statute as written would bring every householder in the state within its scope.⁸

Needless to say, an employee cannot claim compensation if he is injured while engaged in some activity that bears no relation to the work for which he is employed. An engineer-custodian of a school building in Chicago was killed while repairing his private automobile in a public alley at the rear of the school building, being struck by a scuttle-hole cover blown from the roof of the building. The accident occurred at a time when he was supposed to be on duty, but he had not yet changed his clothing, as was his daily custom, and was engaged in a purely private enterprise, related in no way to the performance of his duties as a school employee.⁹

The Illinois law automatically applies to employers of more than two persons in several classes of "extra-hazardous" occupations, but expressly exempts farmers. A recent interpretation involved a student at the University of Illinois who was regularly employed for three hours each day to drive a milk delivery truck

for the college of agriculture. While so engaged he was seriously injured by a sagging trolley wire across a public street in Urbana. He sued the private electric power company for damages, evidently supposing that his employment by the university was not covered by the workmen's compensation law. He lost his case against the power company, because the appellate court held that his proper recourse was to the workmen's compensation law.

Among the occupations listed as "extrahazardous" is "carriage by land, water or aerial service and loading or unloading in connection therewith, including the distribution of any commodity by horse-drawn or motor-driven vehicle." The university, although it does engage in farming, is held not to be exempted by

the clause which excludes farmers. Furthermore, it was shown at the trial that the university had filed its election voluntarily to accept the terms of the workmen's compensation act early in 1929, and had purchased liability insurance which was in force at the time of the accident, which occurred in 1930.¹⁰

The foregoing cases afford an inkling of the fact that the application of workmen's compensation laws to teachers and other school employees is by no means certain or uniform. Since the general principle of these statutes has been universally accepted, steps to simplify and clarify their bearing upon the public schools would seem to be desirable.

¹⁰*Calvert v. Illinois Power and Light Corporation*, (Ill. App.) 9 N.E. (2d) 443 (1937).

Critics Can Be Convinced

CONSIDERATION of the financial situation of secondary schools during the depression makes it apparent that the program on which many schools have been working does not offer a sound basis for progress. The weakest aspect of the present program seems to be its lack of convincing value to the general public.

Criticisms of the schools from laymen, as well as the frequent failure of the public to stand behind the schools in the depression, furnish ample evidence of this weakness. Unless a program of convincing worth for all kinds of young men and women is developed, and unless such a program is widely explained and justified, criticisms are likely to increase as admission to the schools is granted to the large number of youth not now enrolled and for whom nothing else is open.

The fact that the present program has not gained thorough-going support has doubtless been due to a number of causes. In numerous individual instances the plans adopted may not have been altogether defensible. The policy of immediate expediency has so strongly colored educational undertakings in the past

that it has often been difficult to justify such undertakings by logical deduction from a consistent philosophy of education.

The need for enlisting public understanding and support in advance of new undertakings cannot be too strongly emphasized.

Each element in the high school program, as well as the secondary-school program as a whole, is a matter of legitimate public concern. Not merely additions to the physical plant and changes in the cost of running the schools, but additions to the schools' specific activities, changes in the schools' methods and material of instruction, and year-by-year measures of the schools' educational results, need to be fully explained and justified if the schools are to gain and keep public confidence. Although the value of specific elements in the school program cannot always be measured in terms of thoroughly tangible returns, the nature of the returns which may fairly be expected should be kept constantly to the fore, both in planning the program and in justifying it to the public.—From *Issues of Secondary Education*, Department of Secondary School Principals, National Education Assn.

⁷*Compton v. Industrial Commission et al.*, 288 Ill. 41, 122 N.E. 872 (1919).

⁸*Board of Education of District No. 4, Town 12 v. Industrial Commission et al.*, (Ill.) 178 N.E. 875 (1931).

⁹*Board of Education of City of Chicago v. Industrial Commission et al.*, 321 Ill. 23, 151 N.E. 499 (1926).

Houston Pupils Approve

E. E. OBERHOLTZER

THERE has been much discussion concerning the modern school and especially its trend toward integration. Many so-called integrated curriculums have been produced. Houston makes no claim to any particularly unique contribution in the field except that this new curriculum seems to be enhancing the learning processes among children of the elementary school.

The modern school in some way must help the pupil to meet modern problems of living. More and more we are coming to the conclusion that the school must be adapted to the living conditions of the children and must be pointed in the way that will help them to live useful lives in the society in which they live. Growing children make special demands upon all agencies that contribute to the upbuilding of their lives. The school must recognize these demands and so plan its work that maximum good may accrue to the children because of the experiences provided and directed by the school.

Growing children relish a change in their daily program of classroom activities just as they enjoy a change in their diet. The variety of activities scientifically planned in the classroom should produce the same kind of healthy growth in school achievement that the well balanced diet produces in the physical body.

Happy in Their Work

One test of a good school is whether or not the children like it. If children are so enthusiastic about the school that they turn aside from the so-called distracting popular appeals outside, it is *prima facie* evidence that the school is challenging their interests. In such a school the pupils are more concerned about the activities in which they are engaged and less concerned about holidays or half-day dismissals. These children are eager to stay in school to finish the thing in which they are interested and to enjoy the full fruition

of their effort, the satisfaction of originating and creating products of their own design.

The new curriculum in the elementary schools of Houston makes provision for all of the children to be happy in their work. The school work is so planned that individual differences in children's attitudes, interests and abilities are properly cared for by group and individual work needed for both social and individual development. For this reason, the varied activity program works splendidly with this new curriculum.

The philosophy underlying this curriculum is that children must be taught to grapple with the real situations of life and that the way to make these real is to let the children face some of the problems of daily life. Hence, units of work are drawn from the home, farm and community life, related in such a way that problems arising become meaningful, as the various aspects are studied in the light of historical, cultural, economic or social implications.

A Step Forward

In the organization of the curriculum, the planners have set up units of work organized about a central theme or some of the "big ideas" related to the learnings which help to lead to what the planners believe to be desired outcomes for proper living. Of course, this curriculum is not a thing strangely different from that which progressive schools are now using. It is, however, quite a step forward from the old day-by-day recitation type, ten or fifteen-minute period program, which cuts the day into so many cross sections and shifts the scene of action so often that children never stay long enough in any one situation really to appreciate what it is all about.

The integrated curriculum* is set

*Oberholtzer, E. E.: *An Integrated Curriculum in Practice*. New York: Bureau of Publications, Teachers College, Columbia University, 1937.

Houston, Tex., lays no claim to a unique contribution to the field of integrated curriculums, yet in its trial stages the superintendent believes it has promoted natural growth and adaptation to a modern way of life

up in major units, which may continue for periods of three to twelve weeks. The whole idea of subjects to be taught has been dispensed with and the children are brought face to face with real problems to be studied, with goals or purposes planned, with methods and ways to attack these problems, which to them are both interesting and challenging. This adds zest to school work.

Many of the teachers who launched into this new curriculum were alarmed at first, because they felt they were sailing on an uncharted sea, fearful that they might not make a safe journey and come into harbor with cargoes socially recognized and approved.

The teachers feared a shortage of marks and records showing that their pupils had achieved the mechanical skills necessary to their being rated as respectable pupils in arithmetic, reading, writing and spelling, so highly appraised by some of the country's educators.

The teachers soon found, however, that the children were getting other values to compensate for losses, if there were any. The pupils were interested; they worked without nagging; they chose ideas that they wanted to put into practice; they created; they learned both by doing and by seeing the need for such learning. After all is said and done, satisfaction means a great deal to the pupil, as well as the teacher, and when the first alarm had been dis-

pelled, teachers became placated and the children called for more of this type of instruction.

As a matter of fact, according to the tests given during the study, even in the acquiring of skills, the pupils who were taught according to this new type of curriculum required less than half the practice time required by those being taught according to the subject-time allotment day-by-day program.

Through this means they saved half the time commonly given to drill techniques, and thereby gained for themselves time that they could devote to things they liked to do, time for providing new opportunities of enrichment, time for invading new learning areas. To the class that used twice this amount of time in the subject type of program, little opportunity was left for this enrichment and creative type of individual and group work.

In the classes that were allowed more free time for creative and problem-solving activities, learnings in the fields of the regular subjects were found to be enhanced. These pupils found that they could read and write and calculate as well as the other children; they found also that they had more time to read in the library, greatly exceeding by many hundreds of pages of reading those children who had remained in the old subject-type classes.

In a test of their growth in personal traits, the children showed superior development in initiative, self-reliance and creative endeavor. Both parents and teachers made special observation of the fact that these children developed more rapidly by the type of work that enabled them to make choices and decisions, as well as to use their own ideas in creating, developing and achieving distinction in the fields of work to which they desired to devote themselves.

As a result, the pupils and teachers who participated in this try-out period of the integrated curriculum believe that it is an improvement both in organization and in enrichment of materials and method, and that it promotes natural growth and development through the cooperative effort and interest of the learning group. Teachers feel that they are

freer from administrative restrictions and that they are also enabled to assume greater responsibility for the planning and the development of the school program.

The new curriculum has stimu-

lated them to enrich their fields of reading; it has served to increase among them professional leadership; it has enlarged the scope and meaning of social functions and activities of the elementary school.

A New Deal for the Apprentice

WILLIAM F. PATTERSON

APPRENTICESHIP is one of the most important problems facing American educators and leaders in management and labor. America needs skilled workers and apprenticeship must provide them.

There never has been any uniform apprenticeship system. That does not mean there have not been individual apprenticeship set-ups. Most of these systems maintained a sound type of apprenticeships. Many were abandoned, however, when employers were forced to lay off skilled workers.

For the last two years the Federal Committee on Apprentice Training has been assigned the job of tying together the efforts of those who have been promoting uniform labor standards of apprenticeship. The inaccuracy of the statement that the automatic machine was making the skilled workman unnecessary can be shown by figures of the U. S. Office of Education, demonstrating that in the last two or three decades the need for skilled workers has risen steadily.

Another important factor contributing to the neglect of apprenticeship was the fact that an abundant supply of skilled workers came from Europe, and therefore made unnecessary any large scale design for building skilled workmen. The immigration laws of 1924 virtually put a stop to the influx of foreign skilled workers. In addition a large number have left the United States.

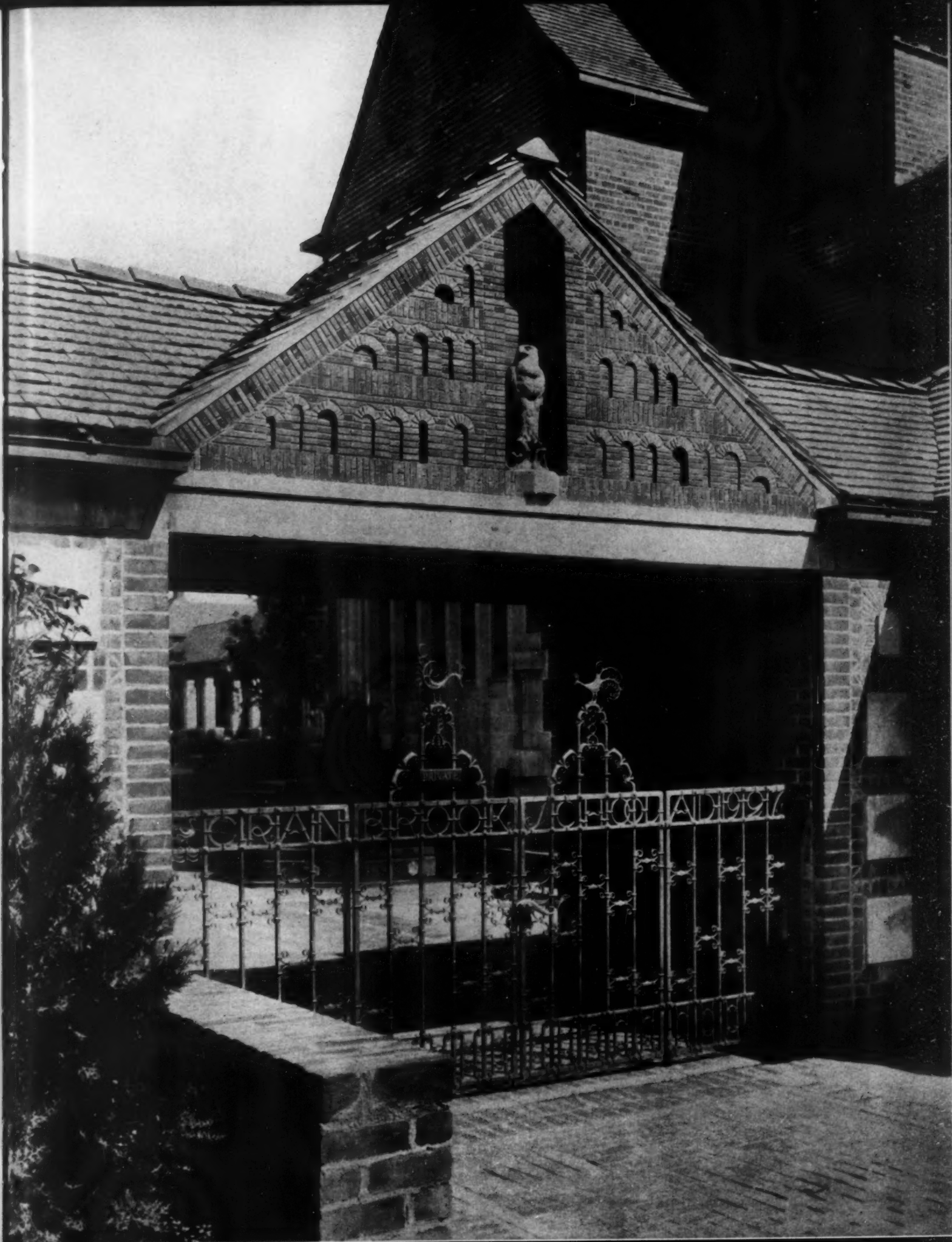
The apprenticeship system which the Federal Committee on Apprentice Training considers best able to provide rounded work experience, and the one most likely to stand up permanently, is one which is largely managed by industry. Such a system is supervised by a local trade committee made up of employer and

employee representation equally, who are advised by the local school authorities and other public officials. The committee acts on all matters pertaining to the apprentice as a worker, such as wages, hours, complaints and agreements.

Those whose business is to deal with young people know that there is a large group whose talents and inclinations point them in the direction of those occupations which can utilize most effectively their particular aptitude for manual dexterity. These young men and women can best develop themselves as workers and serve a more useful place in the industrial scheme by being directed in the skilled trades. Among this group the vocational educators are doing splendid work in studying their individual bents and in helping them to find the trade or occupation for which they are best suited.

It is generally agreed that there is no substitute for actual experience on the job. Plans have been based on that assumption, with a sufficient amount of related instruction in the school included to enable the apprentice to become a more substantial citizen as well as a competent worker. Upon the well-grounded experience in the technical processes of the trade we maintain that there should be laid a superstructure of training in the technical and related aspects of the trade which can only be obtained in the school.

Those working in the field of apprenticeship have the opportunity to strive for higher labor standards for those who are to enter the skilled trades and thus guarantee them a larger measure of economic security and also the opportunity to work with industry to provide adequate supplies of superior workmen.



THE SCHOOL PLANT

Seven-Point Plan

DEDICATION a year ago of the Lewis E. Maire Elementary School added a completely modern and fireproof building to the school system of Grosse Pointe, Mich. It was built as a Public Works Administration project. As the first unit of a building designed ultimately to house approximately 1,000 pupils, the portion of the building now occupied has a capacity of 675 pupils.

The architectural design of the exterior is Flemish in its motive. The interior design is essentially modern in its simplicity and combines maintenance efficiency with a break from the traditional right angles at corridor ceiling, door entrances and windows. In developing plans and later in checking items or features to be included or excluded from the plans, several criteria were employed.



The gymnasium becomes an auditorium when the equipment, which is mounted on units, is raised out of the way. The stage is at the right.



Movable equipment is used in classrooms from kindergarten to grade six.

1. The building should be structurally as safe and permanent as economically possible.

This led to the use of reinforced concrete construction, with brick exterior and poured gypsum and slate for the pitched roof central section. The building was limited in height to two stories, except for a small central unit. Kindergarten, lower grade rooms, auditorium and gymnasium are located on the first floor.

The plan includes the location of stairways at strategic places and the inclusion of built-in standpipe and fire hose cabinets so that all parts of the building are accessible by fire hose. A dual fire alarm system with stations about the building automatically calls the fire department and sets off the alarm bell in all parts of the building when the glass is broken. In all classroom and outside doors hardware is used that permits exit from rooms or building even when the doors are locked from the outside.

2. In recognition of the permanent character of the building and the probable change in educational needs during the life of the building, provision must be made for flexibility of usage of space and equipment.

at Grosse Pointe

S. M. BROWNELL



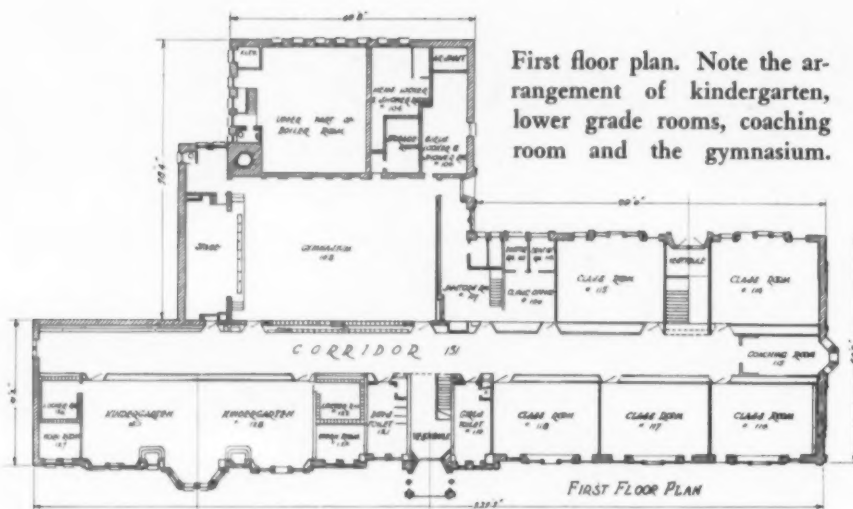
In recognition of this factor, the end walls of the rooms were not constructed as bearing walls. Built-in cabinets of a standard size were located in the corridor walls so as to be easily interchangeable. Here also were placed heating and ventilating ducts and corridor lockers. Rooms, even such special ones as the library, music and art rooms were designed and equipped to facilitate their specialized usage and also to permit their use for regular class groups. The building itself, constructed on a unit basis, was planned and located on the site to permit additions to be built economically and without spoiling the architectural design, even beyond the calculated ultimate capacity.

Throughout the building, from kindergarten to grade six, movable equipment was used. The gymnasium and auditorium were located adjacent so that the stage of the auditorium could be used in conjunction

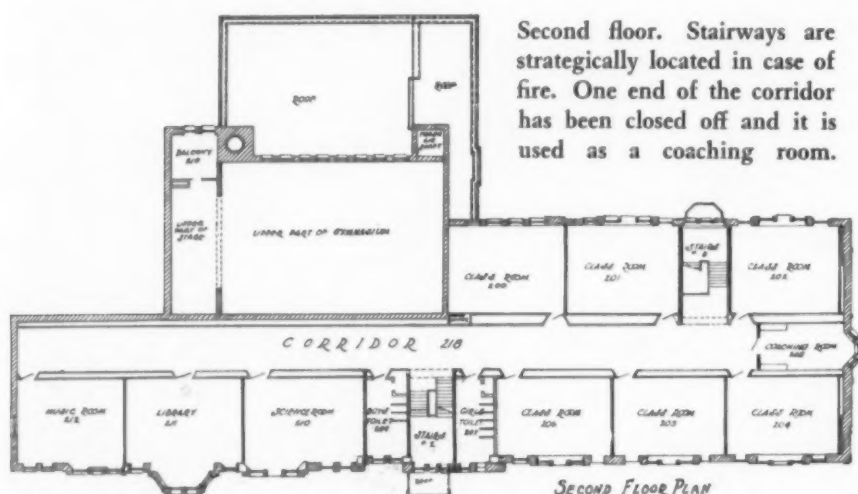
The first unit of the Lewis E. Maire Elementary School at Grosse Pointe, Mich., ultimately to house 1,000 pupils, is modern in every detail. Plans were drawn by O'Dell and Rowland, associate architects, Detroit.



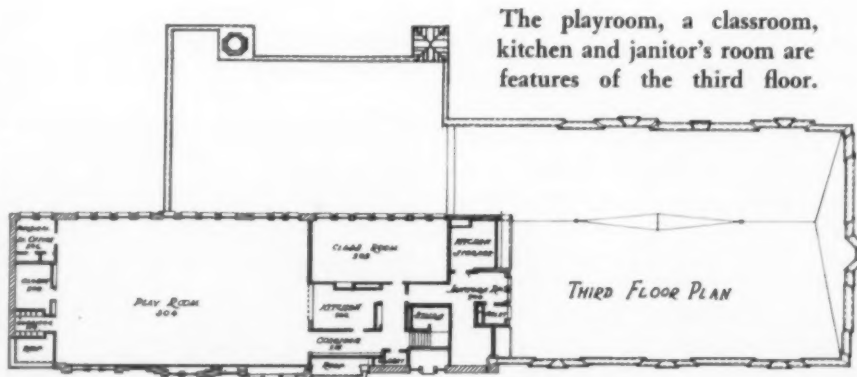
Fourth grade pupils make plans for the day's work with the teacher.



First floor plan. Note the arrangement of kindergarten, lower grade rooms, coaching room and the gymnasium.



Second floor. Stairways are strategically located in case of fire. One end of the corridor has been closed off and it is used as a coaching room.



The playroom, a classroom, kitchen and janitor's room are features of the third floor.

with the gymnasium. Later when the auditorium unit is built the stage may be utilized for the permanent auditorium.

3. With children and staff living in the building the greater part of their waking hours, every provision economically possible should be included to make the school an attractive, convenient and healthful place in which to live.

This third criterion meant that attention was given to detail on the advice of teachers and custodians and as a result of observing pupils. To increase the attractiveness of the interior, the architect eliminated for the most part right angles in corridors, ceiling, door and window recesses, as well as in door archways. Large and well illuminated display cabinets were spotted to catch the eye upon entering the building and in ascending or descending the stairs. Location of drinking fountains and

waste paper chutes near entrances and toilet rooms was for the purpose of saving steps of pupils and of custodians.

A washed and tempered forced air system, a built-in vacuum cleaning system, automatic control of temperature and light intensity in each room, toilet rooms with fixtures the proper height for the pupils and located so as to obtain a maximum

of sunlight and fresh air, provision for preparing and serving hot lunches at noon, inclusion of a well equipped 40 by 60-foot gymnasium and a playroom of equal size, design and location of cabinets and storage facilities for both teachers and custodians, landscaping and laying out well drained and surfaced play areas, all were the result of considering the relation of equipment and areas to their attractiveness to the children and to the effect on their health.

4. The purpose of schooling being to permit teachers to devote their time and energies to working with and guiding pupils, the building should be as adequately planned and equipped as possible to free the teacher from having to devote time to the mechanics of operating the school.

Here it is pertinent to mention certain details of the building. In classrooms, use of the alternating blackboard concentrates a large amount of blackboard surface in the middle front of the room. Windows are of the type that may be operated without using a window pole. Temperature of the room is thermostatically

controlled. Intensity of light is regulated by a photo-electric cell. The clocks and bell system are likewise automatically controlled.

Rooms are equipped with intercommunicating phones, individual radio outlets and specially designed storage cabinets which include teacher's wardrobe, shelves for book storage at pupil height and a filing unit. Above the blackboard and at the

sides and rear of the room there is corkboard with adjustable hangers for suspending maps and pictures. Two combination units in each room may be used as display shelves, easels, corkboard or blackboard units.

Electric wall outlets in the front and rear of each room, shoe lockers in the gymnasium, wrap lockers in the corridor and specially designed storage cabinets in the library, science, art, music and kindergarten rooms have been provided to free the teacher's time and energy for maximum work with the pupils.

5. Realizing the increasing public use that is made of schools, the building should incorporate provision for adult building usage so as to be most convenient for the public and less inconvenient for school operation when so used.

Recognition of this criterion is most clearly shown by inspection of the gymnasium in its location, design and provision for dressing rooms for adults. Direct access to the gymnasium is possible through a special entrance and with its separate locker



Interesting features of this corner in the kindergarten room are the cork-board paneling on the folding partition between the kindergarten units, the aquarium, the movable type of furniture and the floor of asphalt tile.

and dressing rooms there is no need for adult groups to enter any other portion of the building. The combination playroom-lunchroom, with the facilities readily to serve either children or adults, is another example of



Light intensity is regulated by a photo-electric cell and the temperature is thermostatically controlled.



Corridor, showing lockers. The vaulted ceiling is acoustically treated.

planning for both adult and pupil usage of the building.

6. Realizing the long period of time for which the building will be utilized, the materials used should be such as to permit the most economical operation and maintenance of the entire school plant.

Terrazzo floors in toilets, copper hot water pipes, marble in corridor walls to a height sufficient to prevent finger marking of walls, mastic tile floors, marble or slate window stools, locks on doors which when unlocked in the morning have no moving parts operating during the day, steel

furniture and folding tables in the lunchroom were chosen in consideration of the long-term operation and maintenance cost.

7. Recognizing the rapid development of improved structural and equipment materials and design, every effort should be made to secure the benefit of modern developments.

In this connection should be mentioned the design and construction of windows that have only recently been placed on the market, the use of oil burners for heating, acoustical treatment in corridors, library, kindergarten, gymnasium and playroom, installation of a radio and public address system and the automatic control of light in classrooms.

There are probably few features of the Lewis E. Maire Elementary School that are not found in other modern school structures. There are probably few structures, however, that combine so many of the features of design, construction and equipment that make a building an attractive, convenient and healthful place.

Where Fires Originate

IN ANALYZING 875 out of more than 1,200 school fires Dr. David J. Price, chief of the chemical engineering research division of the bureau of chemistry and soils, U. S. Department of Agriculture, finds the basement the most frequent source of fires and recognizes it as the most hazardous portion of a school building. The boiler room is second, attic third, roof fourth, chemical laboratory fifth, classroom sixth and assembly room seventh.

There were more fires in the basements of elementary schools than in basements of high schools, and decidedly more fires in elementary schools than in high schools, the federal engineer revealed. Fires occur in school buildings at the rate of more than five a day, and the annual loss is more than \$5,000,000.

Doctor Price points out the need for inspection and supervision of rural school buildings, during construction and before occupancy. "This inspection must include the

heating and lighting equipment and similar installations from the standpoint of safety before school children are allowed to occupy the building."

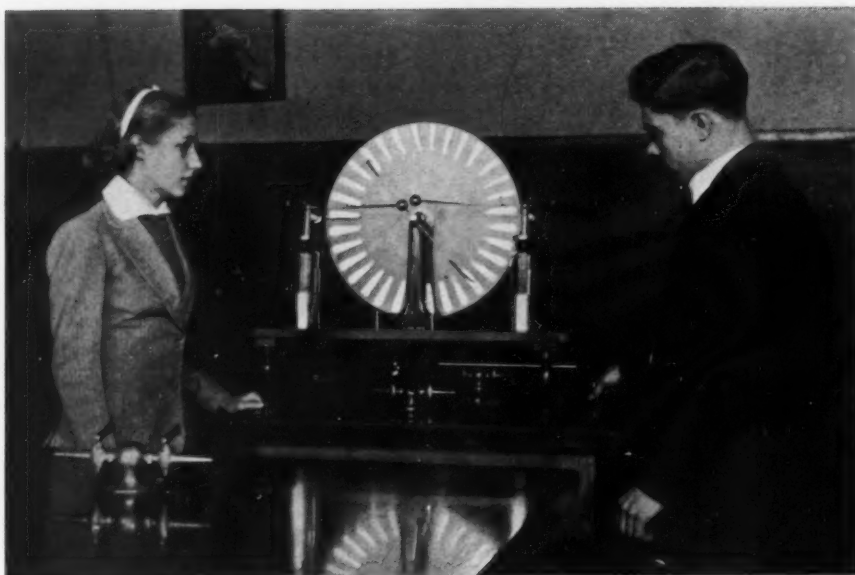
The federal engineer recommends that inspections be made each month by a group consisting of a member of the teaching staff, the building custodian and a member of the local fire department.

To avert disasters such as the tragic explosion in the Texas schoolhouse, Doctor Price recommends: (1) immediate inspection of basements and unoccupied spaces under classrooms and the removal of combustible materials from these spaces; (2) proper supervision of construction plans for new school buildings or improvements and additions to existing buildings with respect to safe occupancy; (3) installation of heating and lighting equipment and appliances by properly trained workmen in compliance with standard installation codes; (4) removal of

school work, involving fire or explosion hazards, from underneath or close to class recitation rooms; (5) inspection and supervision of rural schools on a par with that given to city schools, and (6) regular fire drills under supervision of qualified authorities.

The loss of life in the Texas school explosion—approximately 300—was the greatest in any schoolhouse disaster. Thirty fires in recent years have caused the loss of 800 lives and injuries to several hundred people. Among the major school disasters are: Lakeview School, Collinwood, Ohio, 1908, 175 lives lost; Cleveland Rural School, Camden, S. C., 1923, 77 lives lost; Rural School, Babbs Switch, Okla., 1924, 36 lives lost; Hope Development School, Playa del Ray, Calif., 1924, 23 lives lost; Parochial School, Peabody, Mass., 1915, 22 pupils burned to death; St. Boniface College, Manitoba, 1922, 10 lives lost; Beauval Mission School, Saskatchewan, 1927, 20 lives lost.

An increasing number of rural school buildings are being constructed of fireproof and fire-resistive materials.



Pupils working with the electrostatic machine.

Set for Science

HAROLD PAULLUS

THE last five years have witnessed a systematic organization and introduction of departments in the Crystal City Public Schools, Crystal City, Mo. First, there was the reorganization of home economics,¹ changing it from a general to a vocational course; then the improvement of the music department,² followed by the development of the industrial arts department.³

The Crystal City science department has three main aims in offering science to the pupil: (1) to develop his appreciation for science so that he can understand life better and adjust himself better to a given environment; (2) to prepare him for work in the local glass factory on the completion of the twelfth grade, or (3) to prepare him for college.

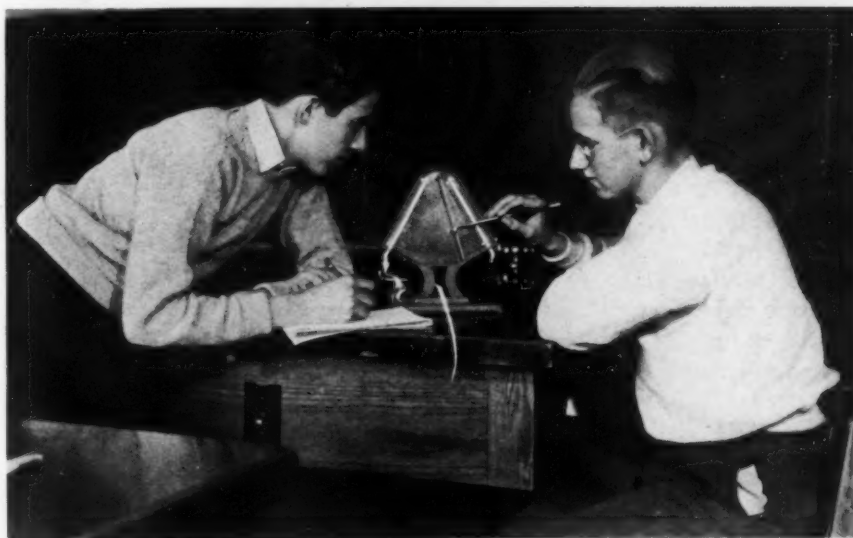
The purpose of the general science and biology course is to help the pupil appreciate and understand his

environment so that he may become a more useful citizen. In addition to the regular school work each pupil in general science is required to work up a problem or project in which he is particularly interested. It may require from a few days to several weeks to complete the project. Among the projects that have been completed in past years are the construction and setting up of telegraph sets, crystal sets, electro-magnets, simple dynamos, steam engines and steam boats. The last week or two of school is set aside for each pupil to demonstrate and explain his project to other members of the class.

In biology, each pupil is required to present an insect collection and



At right: A section of the storeroom. Below: Learning how to determine relative humidity in the air by means of the hygrodeik.



¹Hatcher, Hazel: School Cottage Dressed in Home Style, *The NATION'S SCHOOLS* 18:3 (Sept.) 1936.

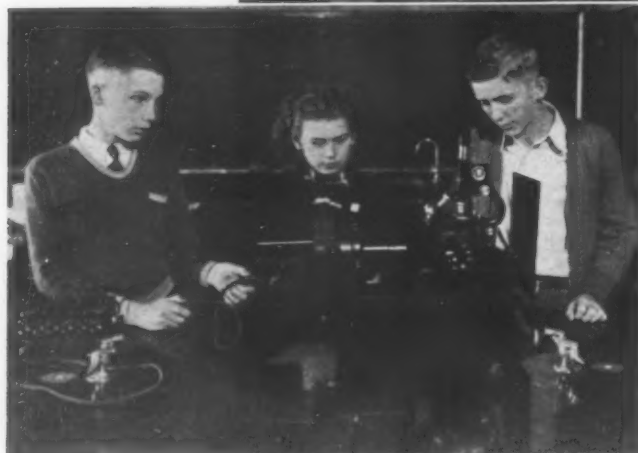
²Sparling, E. A.: Strike Up the Band, *The NATION'S SCHOOLS* 18:4 (Oct.) 1936.

³Robinson, Walter: Shop Follows Factory Pattern, *The NATION'S SCHOOLS* 20:1 (July) 1937.



This alcoholic display shows the effects of beer and whisky on different types of food.

The process of distilling water is a fascinating procedure to these chemistry pupils.



Biology pupils make use of the new micro-projection machine in working out their assigned project.

Many of the pupils have extensive insect collections and each is required to present one collection.



one other project in addition to the regular school work. The purpose of the insect collection is to enable the pupil to become acquainted with the more common insects in his locality. He is not required to memorize their technical names but merely to learn their habitat, life history and their beneficial or harmful activities.

The other project is in biology, the pupil choosing the subject in which he is most interested. Projects that have been completed in the past include leaf collections, flower collections, mounting of skeletons of various animals, mounting of snakes, fish and birds, making a balanced aquarium, alcoholic display showing the effects of beer and whisky on different types of food, and an ecologic survey of streams in this section of Missouri.

One entire biology class took an ecologic survey of several streams as a project. The pupils became much interested in comparing the number and kinds of animals found in swift water with the number and kinds found in still pools. They also compared the number and kinds of animals found in one stream with the number and kinds found in other streams. They then explained to the best of their knowledge why the animals were more numerous in one locality or stream than in another. Pupils worked together in groups of three.

Materials used in this work consisted of a jar to put their specimens in; a small bucket to dip sand, gravel or mud from the bed of the river, creek or pond, and a yard of cheese cloth to separate the animals from the water.

The usual method of procedure was to mark off an area, 4 feet square, in the water, gently lift every large stone out of that area and examine it carefully for aquatic animals. The bucket was then used to scoop up the sand, gravel and mud. This material was washed thoroughly with water by means of a whirling motion. This shook the animals loose and they were caught as the water was strained through the cheese cloth. Pupils were amazed at the large variety of small aquatic animals found. They came to realize that most of the food of fish comes

either directly or indirectly from these small aquatic animals.

Pupils also learned something about the life history of these small animals. One group found the following aquatic animals: stonefly nymphs, Mayfly nymphs, dragonfly nymphs, damselfly nymphs, water beetles, beetle larvae, caddis worm cases, midge cases, blood worms, dobsonfly larvae, mosquito larvae and pupae, snails, snail eggs, crayfish, sidefish, leeches, hydra, water pennies, horsefly larvae, water spiders and tadpoles. One pupil estimated that one mile of Castor River with an average width of 22 feet would have 2,011,832 small animals in it. This number did not include fish.

The biology department at Crystal City has grown rapidly in the past year. A new micro-projection machine, which enables an entire class to see what one person would see through a microscope, was purchased. Other equipment includes four new microscopes, forty-two dissecting sets, forty-two dissecting pans, preserved specimens of various kinds and a large number of life history charts of plants and animals.

Chemistry and physics are recommended only for pupils of better than average ability. A large number of those who have taken chemistry and physics step into good positions at the local glass factory within a short time after graduating. Other pupils taking these courses usually go to college.

Since Crystal City is strictly an industrial city, it is the aim to offer to the superior pupil everything possible in the way of chemistry and physics. Outstanding equipment added to this department during the past year includes an electrostatic machine, analytical balance, Brownian movement apparatus and a large number of chemicals and chemistry apparatus.

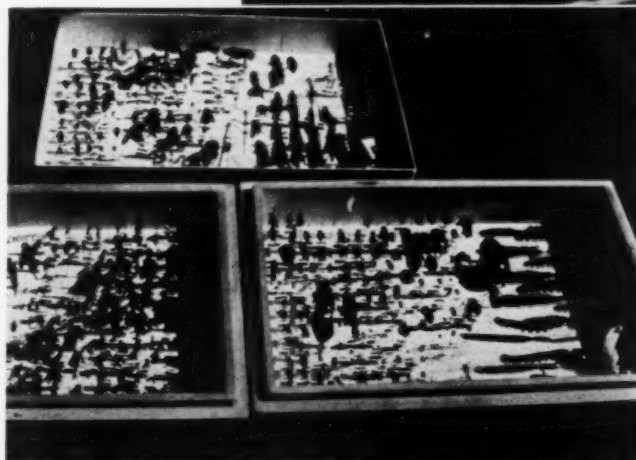
In the last three years the science department has shown an unusual development. This department had little in the way of equipment until 1934. Since 1934 about \$3,000 has been spent for equipment for this department including desks. Science enrollment has increased from 48 pupils in 1934 to 134 pupils in 1937, an increase of 179 per cent over a period of three years.

Comparison of insect collections adds new information concerning the insect's habitat, life history and harmful activities.



The preparation of hydrogen requires care and accuracy because of its inflammability.

Pupils observe the uncanny precision of the new analytical balance recently added to the chemistry department set-up.



Insect collections like these are obtained on field trips in which pupils study harmful and beneficial insect activities.

As Boulder Builds

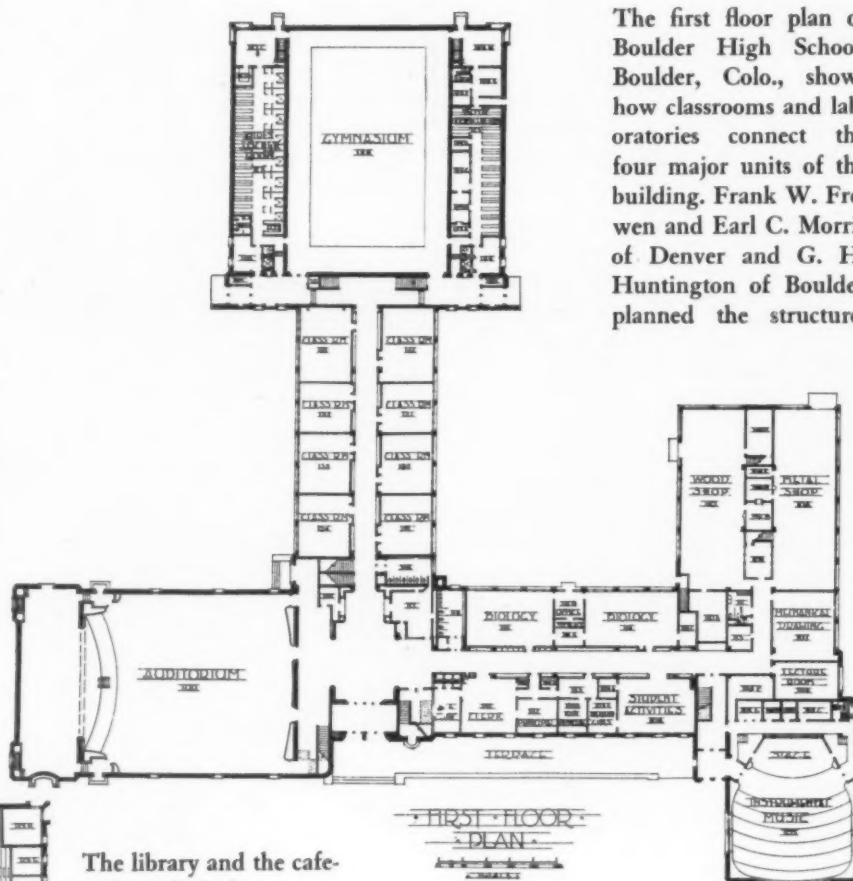
VIRGIL M. ROGERS

BOULDER, COLO., is proud of the fact that its new high school has been built under the shadow of the University of Colorado. The site has its own especial beauty. Directly beyond the building to the west flows the Boulder Creek; beyond that and on a rise of ground is the University of Colorado; still beyond loom those interesting rock formations known locally as the "Flatirons," and beyond those, the snow-capped peaks of the Rocky Mountain Range.

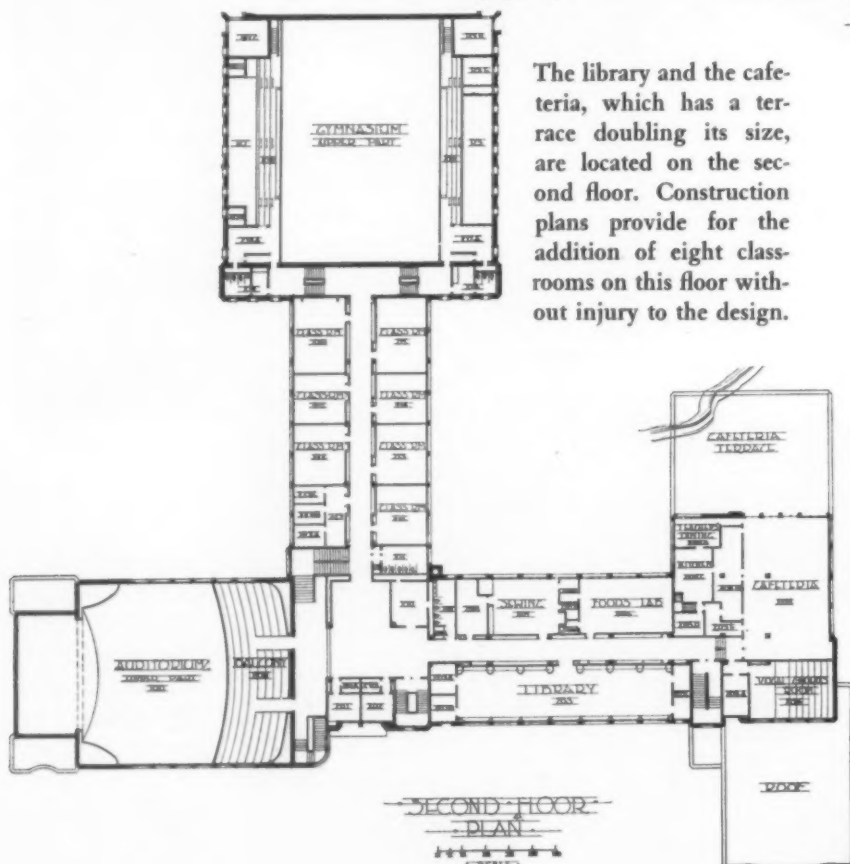
When in 1933 the need for a new high school plant became acute, there was much general opposition because we were then in the midst of the depression. After two bond elections, however, the building was started in 1935; school opened in the new plant Sept. 6, 1937.

The community provided \$336,327, and a grant of \$246,000 was obtained from the Public Works Administration. Incidentally, it is the feeling

The first floor plan of Boulder High School, Boulder, Colo., shows how classrooms and laboratories connect the four major units of the building. Frank W. Frewen and Earl C. Morris of Denver and G. H. Huntington of Boulder planned the structure.



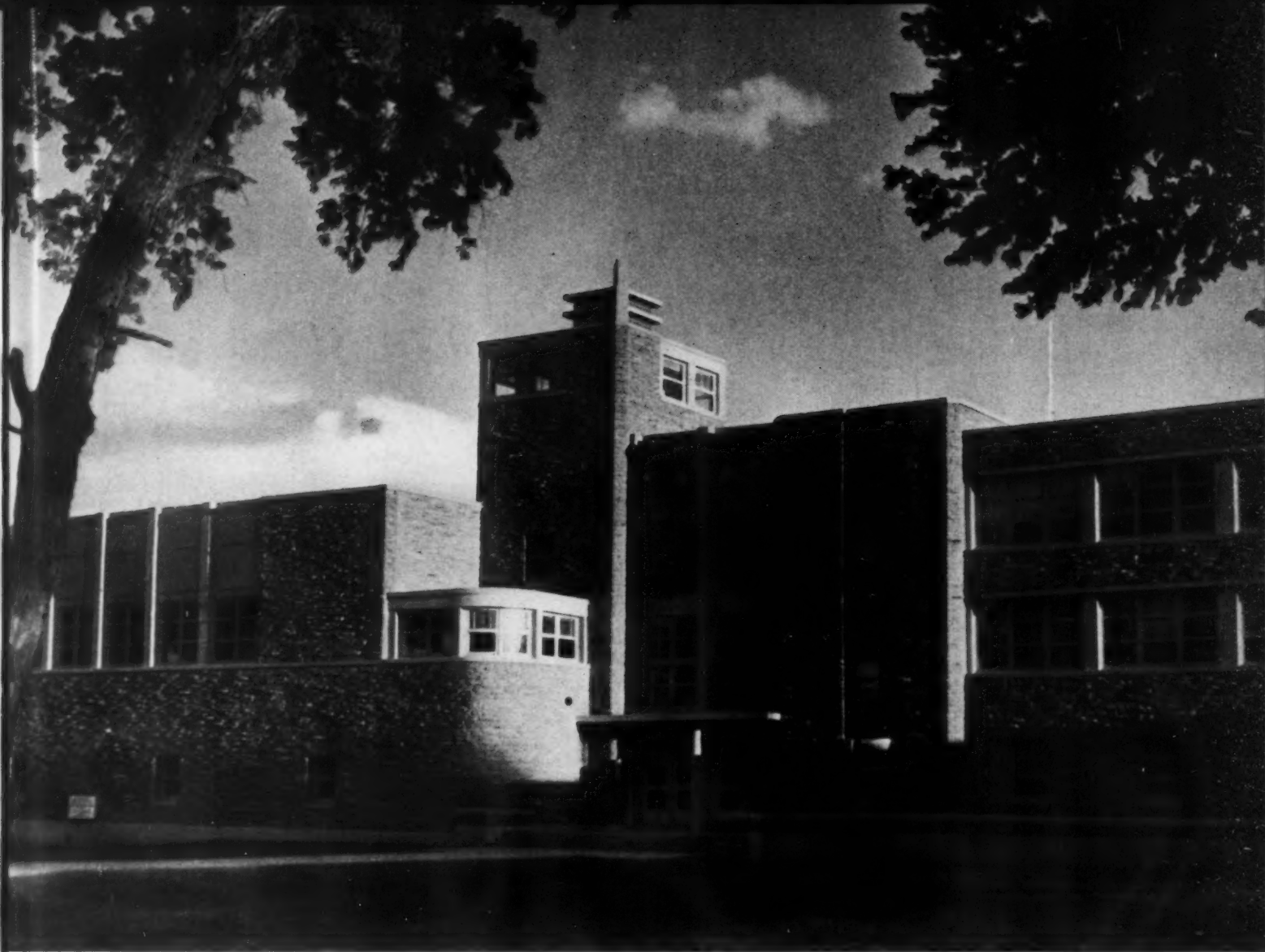
The library and the cafeteria, which has a terrace doubling its size, are located on the second floor. Construction plans provide for the addition of eight classrooms on this floor without injury to the design.



of the board of education and the administration that Boulder has a much better building because of PWA's supervision and careful inspection of all materials. Government representatives made valuable suggestions, and the 45 per cent grant of money made possible a more nearly complete structure than the community could have provided alone.

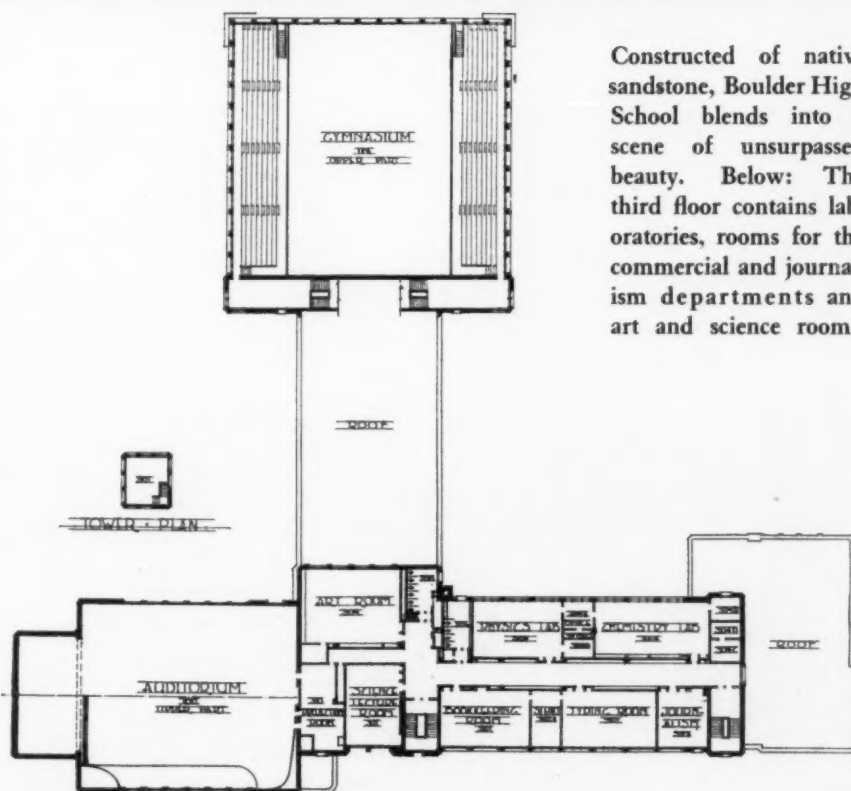
The Rocky Mountains have provided the construction material—native sandstone in a combination of pink, brown, gray and russet. The structure is built in four major units with classrooms and laboratories connecting. These units comprise great rooms of the building.

The auditorium is Unit I, equipped with a spacious stage, indirect neon lighting and modern seating with a capacity of 1,500. The gymnasium, with a large playing floor and seating capacity of 1,700, is

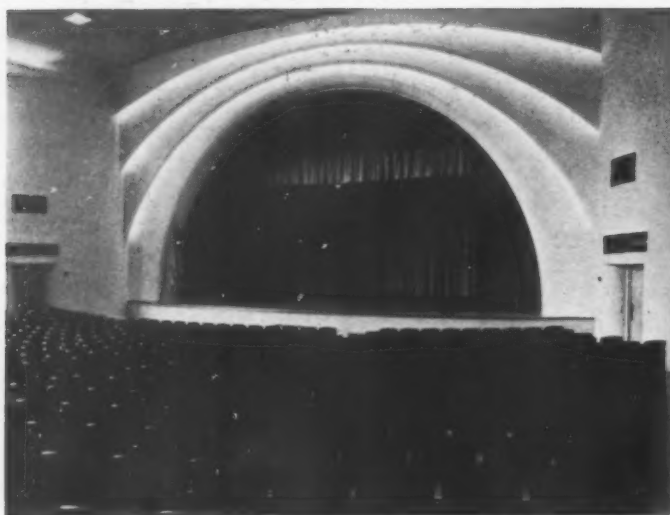


Unit II. The floor has three basketball courts, providing for a standard playing court and two courts cross-wise of the floor. There are in addition to dressing rooms, boys' and girls' corrective gymnasium rooms with walls of glass brick to admit sunlight all through the day. The third unit consists of industrial arts shops with a cafeteria on the second floor.

The fourth unit is the music wing. Here is a little theater arrangement which serves also as a band room. On the second floor are the chorus room and music library. Back of the stage are section practice rooms, instrumental storage space and offices for directors. The general library is located in the center of the building on the second floor and accommodates 150 pupils. Adjacent to the library are two conference and study rooms with glass partitions. The service room and librarian's office are located at the opposite end of the wing.



Constructed of native sandstone, Boulder High School blends into a scene of unsurpassed beauty. Below: The third floor contains laboratories, rooms for the commercial and journalism departments and art and science rooms.



Unique stage lighting is achieved by means of nine tubes of neon light in three grooves over the proscenium arch.

Provision has been made for future growth of the student body. The building is so constructed that eight additional classrooms may be added on the second story without injury to the general design. Adequate heating equipment for expansion also is provided.

New features that heretofore have not commonly been found in school buildings may be mentioned. Fold-away stages lend themselves to a variety of uses. These have been provided in large classrooms in which groups in English literature and social science may be brought together in an integration program. With a

stage in the room, public speaking classes may have the advantage of an audience situation.

Sound deadening materials have been used effectively and extensively—heat insulation in the gymnasium, wall linoleum in the foyer and the little theater, soundproofing and cork in the library, practice rooms, chorus room and social hall and acoustical plastering on the ceilings in the little theater auditorium and chorus room.

Adequate storage space for classroom libraries, supplies, records and

The little theater also serves as a band room. Practice rooms adjoin.

The student council conducts a session in one of the activity rooms planned for social meetings.



teachers' wardrobes, has been provided throughout the building.

Indirect lighting and the use of neon tubing are innovations that have attracted attention. Nine tubes of neon light in three grooves, each tube with a different color of light, make possible with a modern switch-board 220 color combinations over the auditorium proscenium arch.

High school pupils' social needs have been considered in the planning of the building. The student social hall, containing a large fireplace and a kitchenette with the dean of girls' office adjoining, has been built exclusively to meet these needs; a



kitchenette has been built also in the gymnasium wing, adding to the social uses of the gymnasium. The cafeteria is so arranged that dinner dances, banquets and parties may be suitably carried on without interference with other units of the plant.

A complete system of radio and sound is provided in all classrooms and great rooms. Informal furniture, reading tables and comfortable seating have been installed throughout.

Two well-placed terraces have been built in as a part of the architectural scheme. The roof terrace over the shops provides a delightful roof garden for the cafeteria. French doors



The gymnasium (above) has a seating capacity of 1,700. Corrective gymnasium rooms with glass brick walls adjoin. At left: The auditorium, which seats 1,500. Below: Quiet is assured in the library by the use of cork composition floor and acoustical ceiling. Glass partitions separate conference and study rooms.



out of past experience, and members of the board of education who were most persistent in seeing that the community got its money's worth.

The building, grounds and equipment were planned to function in a

open out on the terrace, which when used double the size of the cafeteria. With this arrangement approximately 350 persons can be seated. The terrace at the front of the building ties together the auditorium and the little theater. It may also be used for chorus group performances, the lawn being used as an outdoor theater.

Interior decoration has received much attention. Instead of the traditional schoolroom colors, much blue, pink, green and brown in various shadings have been employed to make for warmth and cheer.

Finally, the entire project is the product of a great deal of democratic cooperation on the part of pupils, teachers, parents, consultants and the school administration. Many of the details about the building, the plans for landscaping and the types of equipment with which the school is furnished are the products of teacher and pupil committees working co-



operatively. Anyone who had an idea to contribute was invited to submit it; as a result, many splendid features have originated with department heads at the University of Colorado, consultants with whom we worked, teachers who suggested arrangement of rooms and departments

modern program of secondary education, the whole being the product of democratic cooperation. The aims of the board of education are expressed in the inscription found on the dedicatory plaque in the foyer: "This Building is Dedicated to Truth, Liberty and Tolerance."

BETTER PLANT PRACTICES

Custodians in Uniform

Perhaps it isn't a bad disposition that makes the custodian so crabby. It may be the clothes he wears.

Lester B. Robertson, custodian-in-charge, Guernsey Consolidated Schools, Guernsey, Wyo., agrees with Dr. H. H. Linn, superintendent of buildings and grounds, Teachers College, Columbia University, who expressed himself on the subject in these columns recently: "Your custodian dressed in any old way, most likely in an old torn shirt and frayed trousers, held up by suspenders, too often handles his job any old way."

"How true is Doctor Linn's statement," Mr. Robertson says, "especially as I observe things through the western portion of the United States. It is surprising what a uniform will do to even the crabby, drab custodian. It sometimes happens that a custodian fails to win the whole-hearted approval of his superintendent and principal because of his personal appearance, and yet, it is the easiest part of his job.

"There may be differences of opinion as to color, price and style in selecting a custodian's uniform. Clothing in which hard dusty work is to be done must be especially durable and selected with the minimum cost in view. The color should be one which will not show soil easily. If the job scheduled is a very dirty one, cover-alls may be used for that purpose to prevent frequent trouser cleaning.

"The male employees of the Minneapolis school system, for example, appear in uniform while on duty. They wear oxford gray trousers, gray shirt, black leather bow tie for safety, white socks for health, and flexible, thick leather soled shoes which prevent tired, aching feet.

"Such a uniform lends cheerfulness, endurance, health and happiness. It is, therefore, incumbent upon every custodian regardless of the size of the school system to be so clad."

Custodian Aids Morals

Mr. Robertson is heard from again, this time on a subject of grave importance—sex irregularity among school children. "The only insurance against such malpractice," he points out, "is keen foresight of the custodial staff. For this reason the duties and responsibilities of school custodians are different

from those of custodians in other positions. Custodians of schools have an added responsibility in exercising moral and character influence on the school. This makes it necessary that they possess clean minds and healthy bodies and more than the average I. Q.

"Superintendents of schools discovered many years ago that disciplinary troubles come from idleness. They realized that if the student mind can be kept active through participation in educational problems and interesting activities there shall then be little time left for unscrupulous practice. As a result the alert superintendents have built up an extracurricular program which aids in keeping youthful minds upon their work and off their bodies.

"Custodians can do much to safeguard young people from falling prey to emotional injuries of this type by putting into practice the following precautions:

1. Custodians should keep book supply closet, dressing, furnace, lunch, pantry, supply, shower, store and backstage make-up rooms securely locked.

2. Custodians should be on the alert for lewd sex literature carelessly left about the school and destroy it at once.

3. Custodians should consider it a duty to insist that all pupils leave the building immediately after basket ball, baseball, play practice, band and other activities which are often held after school hours. These are a few of the important preventive measures.

"Pupils may go to the book supply room, where perhaps they chance upon someone with an unhealthy state of mind and the result is a prolonged necking engagement. If every custodian, with principal and teachers, would pay particular attention to upholding the three measures suggested, then we would all do our part in accomplishing the fundamental aims of the progressive high school. All this may not be the custodian's assigned duty, but it is his unassigned responsibility."

Longer Life for Mops

Here's to a longer life for waxing mops! Someone suggests that one or two thicknesses of an old inner tube be placed around the wood head and behind the wool pad. No more cutting through at the corners. What is more, it ensures a uniform coating of the wax.

Let's Have Color

Color on school walls! Why not? Is it lack of imagination that keeps our hallways and classrooms drab and lifeless? Or is it fear lest livelier shades will prove impractical?

In Kalamazoo, Mich., we discovered a staunch advocate for color in schools, Fillette Many, art supervisor, who has been giving the subject much thought and study. "House painters," Miss Many laments, "seem to have little sensitivity to elusively beautiful colors and too frequently select and use a dirty, irritating ugly brown for which there seems to be no excuse other than their lack of sensitivity to beauty. I also know that the answer given to any question 'Why?' has been 'It does not show dirt.'"

"I believe in grayed colors for background surfaces but grayed colors can be alive, vibrant and beautiful. For young children I believe in the introduction of gay colors, colors in their full intensity—reds, oranges, blues and greens—into the elements of the interior which can be changed more frequently such as large wall, and child-interest illustrations in the corridors and rooms. In Kalamazoo we either paint directly on the walls or we paint on commercial wall coverings and hang them."

The Play's the Thing

California lends itself to all sorts of effects that are not possible elsewhere because of the unsuitability of the climate. There is the outdoor stage, for example, that was discovered one fine day in the Berkeley Hall School at Beverly Hills. Right then and there Mary E. Stevens, principal, was urged to tell us all about it.

"At the rear of our indoor stage are large French doors which open upon a cement platform and a terraced grass plot. To the right and left are large deodars forming ideal wings for entrance and exit. On occasions we have used both the indoor and outdoor stages, lighting the indoor and opening the French doors, the actors moving in and out and down upon the grass terrace. The audience was seated upon the basket ball court below the terrace.

"On other occasions we have closed the French doors and darkened the indoor stage where a hidden chorus was seated. At these times the entire action was staged upon the cement platform and grass plot below."

The idea presents all sorts of possibilities in artistic effects, but as already explained, it requires the famed California weather.

Color Enters the Classroom



Children revel in color on walls and lockers, in flowers and in their own art work.

A VISITOR upon entering the school today immediately should be aware of an art department alive to the best interests of the school, as these are expressed in the color and general plan of the building and its decorations. The traditional schoolroom was a colorless, drab place from which children were glad to escape. The woodwork was usually brown; the walls a dull, dead color, and the pictures were lifeless.

Since color exerts such a strong influence on our feelings and emotions, making us sad or gay, active or inert, why can't our schoolrooms be more colorful? Why can't we be more daring and courageous in the

RUTH E. WHORL

color schemes we use? Strong colors give a sense of vigor and glowing life which dull colors or tones of black, gray and white cannot give. We lack the power to control the home environment of children; but if we try, we may influence it by surrounding children with a higher order of beauty in the schoolroom. Our surroundings would be more beautiful if the eyes were as alive to discords in color as the ears are to discords in music.

The young child in his early art expressions uses pure color and in

this lies the vigor we so admire. He uses color fearlessly and intuitively creates beautiful harmonies. He is given every opportunity to experience color. But as he develops, becoming critical and self-conscious about his work, he must have encouragement in the free use of color or his work becomes drab. Expression in color is one of the most fascinating phases of art study, so children should be encouraged to love color and to use it in every way.

But how can we, with this modern philosophy of teaching, be content with the traditional classroom? What about the countless reproductions in sepia? Can we expect

children to enjoy the drabness of these pictures framed in dull, dark frames? In most cases art quality is entirely lacking and the picture merely records an event. We cannot teach patriotism by hanging "Washington Crossing the Delaware" on our walls or develop character by presenting a cold steel engraving of Lincoln. Why should we keep them? With a greater emphasis on color and a knowledge that these pictures belong to an era that is past, many are being consigned to storage.

Frequently under the brown stain of these old frames is a fine piece of oak or walnut which can be sanded and waxed, preserving the natural beauty of the wood. A vigorous, colorful Franz Marc, Van Gogh, Gauguin or others can be substituted. Even better and less expensive is the work of children. These colorful expressions of children's interests in chalk or paint have the quality we admire in the work of the artist. It is not necessary to emphasize the value of this activity. The increased interest in art work, the colorful addition to the schoolroom, plus the added appreciation of the beauty inherent in wood, make all of this worth while to the school. A frame can be constructed of a simple molding for colorful friezes made by the children. These can be changed frequently as new ones are made. Hallways can be brightened and made more attractive if these are used for decorations.

In Planning New Buildings

All this is not intended to convey the impression that the art department can be of help only in matters involving the selection of pictures and the brightening of old school buildings. The art teacher with training and sensitiveness to color should be consulted by the school architect when a new building is planned. Color will play an important part if the result is a building not only adequate for school needs but attractive as well.

Architects and art teachers must not fail to take into account the life of the times in this service to the community. School buildings today should be functional, beautiful and American, making use of the new materials produced by this age. Both

the interior and exterior must have an esthetic appeal, emphasizing color as well as line and form. Color is still used sparingly on the outside, except in cases of ornament, but it should be an important factor in planning the interior.

Color is not all a matter of beauty. While feeling and sensitiveness are important factors, color can be used more intelligently and effectively because of the recent advancements made in this field by the science of chemistry. We must think of color in relation to light. Colors must be planned for schoolroom walls which will reflect the maximum amount of light, and be at the same time attractive backgrounds for furnishings and decorations. Until the theory of color is reduced to a logical use of the color wheel and a standardization made of the names of colors, there will be confusion in terms. New color names appear each season, bearing no relation to the real properties of color.

General Scheme for Building

In speaking of the properties or measurements of color, it seems best to limit them to three characteristics: hue, the name of the color; value, the lightness or darkness of the color, and intensity, the brightness or grayness of the color. For example, if we take the color blue, in hue it is blue, in value it may be dark or light (approaching either black or white), and in intensity, it may be bright blue or gray blue. There will of course be as many variations of these changes in color as the eye can detect, but the foregoing terms will serve for better identification than the trade or commercial names given them.

Since a school building should be beautiful and at the same time adaptable to an all-around educational life, let us consider the colors which can be used to enhance its beauty. A general scheme should be decided upon for the entire building, so there is a feeling of unity. Light tones should be used on the walls of classrooms where light must be of first consideration. Light yellow or ivory with a ceiling lighter in tone is always an excellent choice. It is sunny and lively, making a background harmonious with any

color scheme chosen for room decoration.

Must woodwork always be stained and shellacked? Can it not be oiled and waxed? A soft natural finish reduces the glare and is much more attractive. A dull gray green enamel in a mat finish is an excellent color for woodwork when walls are light yellow. This can be used in old buildings which are being redecorated.

Background Colors

The background colors may vary in rooms not used as classrooms. Since vision is not the most important factor in the principal's office, in the teachers' rest room, gymnasium and other rooms, light tones of other colors may be used. Light blue-green is a restful color for walls, with woodwork of a harmonizing color. Light tones of blue or red look pale and faded and should be avoided. Cool or warm colors, set off with bright touches of complementary colors, lend character to any interior. Bright pure color should be used to give variety and vigor to the color scheme.

Interest can be added to the room by displaying beautiful objects attractive to the child at his level of appreciation. Surround him with objects beautiful in line, form and color. Allow him to arrange them, for in this way outlets are provided for creative expression. Publishers of books are aware of the need for attractive, colorful books, because when they are arranged in rows, they add to the attractiveness of the room.

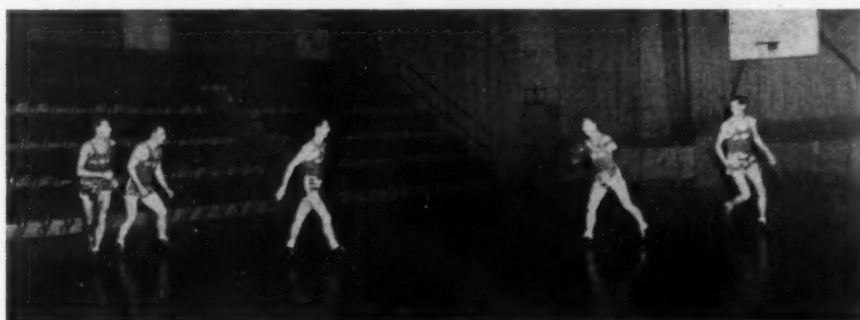
Even the bookshelves themselves may provide a bright note in the room. Use color, but use it intelligently as well as sensitively.

The art teacher should develop within her pupils a consciousness of the need for beauty in the everyday things that surround them. All this is also valuable to the community as it raises the standard of living, gives us more intelligent consumers and makes citizens more conscious of the need for beauty in their surroundings. We need to bring more color into the lives of children, so why not begin by providing the child with a colorful schoolroom environment?

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Pupils form in two lines at both ends of the counter.

Stopping Food Leaks

DOROTHEA F. BEHM

THE primary responsibility of the school cafeteria is the serving of good, wholesome, well-prepared and attractive food to school children at lowest possible prices. Of great importance in this work is proper management with an adequate food control and checking system. In the Central High School cafeteria in Syracuse, N. Y., a plan has been devised that gives all the information needed.

Restaurants have waitresses' guest checks for checking numbers of portions served and paid for, but a cafe-

teria too often has no way of getting such a check. We are all concerned that our cashier's cash balance tallies with the cash register reading at the end of a serving period, but we also want to know whether the cash register total is the same as the total cash value of food served and, if it is not, where to look for the leaks.

This is the plan designed to determine the cash value of food. At the end of each day's serving period, the manager receives reports from employees on specially prepared forms as to number of portions pre-

pared and the number left unsold. For instance, the baker reports the actual number of servings of puddings, cakes or cookies, fruits and pastries sent to the counter; the sandwich and salad makers list the number of salads and sandwiches of each kind made up and the number returned to the kitchen.

A somewhat different method is applied to the range cook's report. The employees serving at each of the steam tables is given a list showing the number of counted dishes which will be used for serving. At the end of the lunch period the total number of each of the foods served—plate dinners, separate vegetables, soups and hot dishes—are turned in

Greetings to the N.E.A.



O the Department of Superintendence of the N. E. A. . . . Heywood-Wakefield Company extends friendly greetings and congratulations upon a year of outstanding achievement. May your meeting prove a source of help and inspiration for the tasks of the year ahead . . . and, may those constructive resolutions which you adopt in Atlantic City be realized quickly and completely.

¶ It has been a genuine pleasure to work with N. E. A. members over a long period of years and

we sincerely appreciate the business which has been awarded to us. We know that your days during the meeting are busy ones, but, if you should have a few minutes to spare, we shall be pleased to welcome you at our Exhibit Booths 14, 16, 18, 20 in Section I. There will be an interesting display of our many types of school seating, any of which our representatives will be pleased to review with you in detail, if desired.

HEYWOOD-WAKEFIELD

Established 1826

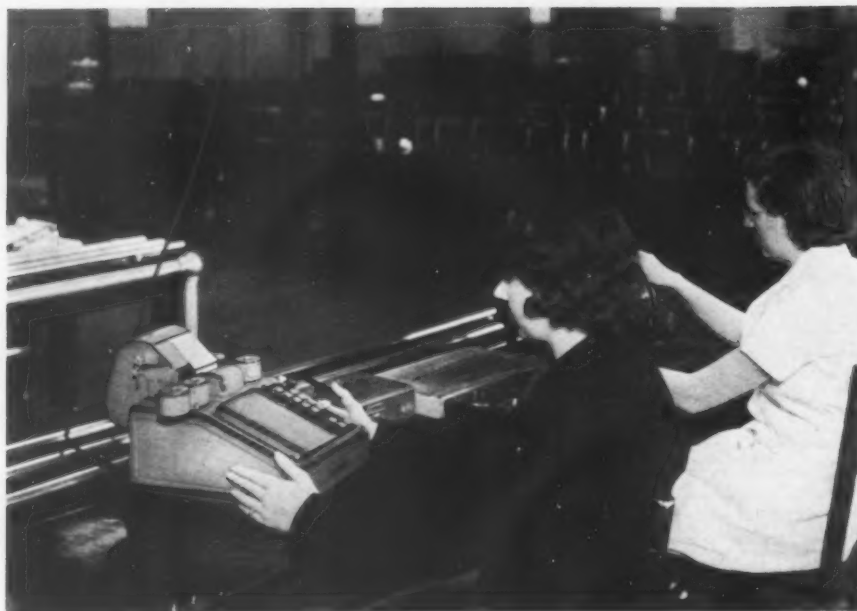


HEYWOOD-WAKEFIELD

ESTABLISHED 1826

School Furniture Division

GARDNER, MASS.



A food checking machine itemizes and totals the contents of each tray.

to the manager. These amounts are checked with the portion yield of the recipes to assure the proper number of servings.

The count of beverages, which naturally are mostly half-pints of milk, is easy to get from the daily order sheet, after deduction of the

number of left-over bottles as reported by the counter boy.

Ice cream, often hard to check, proves no difficulty, because sliced brick ice cream is served, each piece wrapped separately for easy and sanitary serving. To get the number of portions sold the number of slices

left are counted and subtracted from the amount on hand.

When all this information is in the hands of the manager she can easily find the cash value of sales of each food by multiplying the total number sold by the selling price. If the grand total is at great variance with the totals of all the cash registers she can find where the discrepancy occurs by getting the food distribution from the adding machine tape.

This machine, which looks and operates like an electric adding machine, is also a food checking machine because it has two rows of character keys to the right of the number keys. There is one key for each kind of food sold, and one for the plate dinner: desserts, dinners, soups, beverages, vegetables, salads, pastries, cakes and cookies, sandwiches, breads, fruits and hot dishes.

These character keys are arranged on the keyboard so as to be as near as possible to the key that indicates the cost of the food, e.g. Bev-5c. When these keys are struck they imprint on the tape a code letter instead of the three letters shown on



Food distribution and the cash value of the food sold are easily determined from records of cashier and food checker.



Hand in hand FOR BETTER HEALTH

IT'S fun to go to school! Especially when that school is equipped with Nesbitt Heating and Ventilating Units—the modern units that syncretize room and airstream temperature and make every day a June day. Nesbitt Units go hand in hand with the better health programs being conducted by modern school authorities. They furnish fresh air at room temperature and circulate it without creating dangerous drafts. There is no overheating—no cold spots—no quick changes in temperature to encourage colds and other respiratory diseases. Nesbitt Heating and Ventilating Units are extensively used all over the United States and Canada. More of these popular, scientifically designed units are going into both new schools and old every day than ever before in the history of our organization. Get all the data now. Phone the nearest American Blower Branch Office.

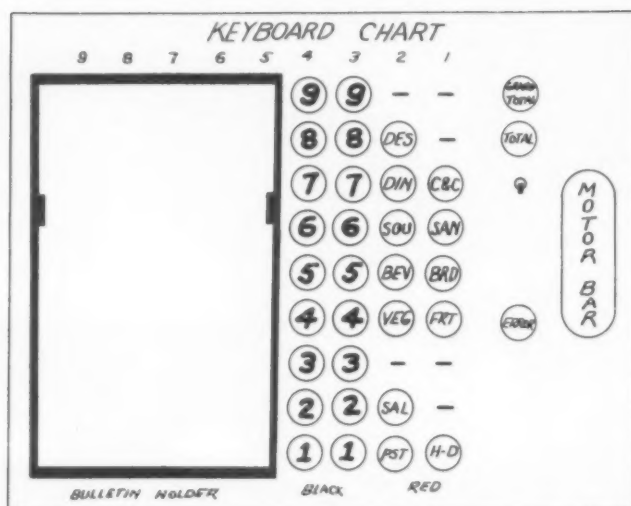
AMERICAN BLOWER CORP.

Division of American Radiator and Standard Sanitary Corp.

6000 Russell Street, Detroit, Mich. Canadian Sirocco Co., Ltd., Windsor, Ont.



The Training School Building of Washington State Normal School, Cheney, Washington, is equipped with Nesbitt Heating and Ventilating Units throughout. George M. Rasque, Architect—A. G. Ruslight & Company, Contractors.



The food checking machine has two rows of character keys at the right of the number keys, one key for each kind of food sold. Below: When there is a variance in the grand total the discrepancy can be found by getting the food distribution from the adding machine tape.

FOOD DISTRIBUTION											
DES	DIN	SOU	BEV	VEG	SAL	PST	C&C	SAN	BRD	FRT	H-D
B	C	D	E	H	L	M	A	S	T	X	Z
THL	THL	THL	THL	THL	THL	THL	THL	THL	THL	THL	THL
THL	THL	THL	THL	THL	THL	THL	THL	THL	THL	THL	THL
THL	THL	THL	THL	THL	THL	THL	THL	THL	THL	THL	THL
III	THL	I	THL	THL	THL	I	THL	THL	THL	THL	THL
	THL		THL	THL	THL	THL	THL	THL	THL	THL	THL
			THL	THL	THL	THL	THL	THL	THL	THL	THL
			THL	THL	THL	THL	THL	THL	THL	THL	THL
			THL	THL	THL	THL	THL	THL	THL	THL	THL
			THL	THL	THL	THL	THL	THL	THL	THL	THL
18	25	16	44	20	15	7	16	15	30	28	21
05	20	05	05	05	05	05	05	05	05	05	05
.90	5.00	.80	2.20	1.00	.75	.70	1.12	.75	1.30	1.40	1.05

the top of the key. This is done because of the difficulty and expense involved in printing three letters instead of one. The machine also has a double wind paper tape, the purpose of which will be discussed later. The bulletin holder, carrying a copy of the menu and prices, is used by new or inexperienced pupil checkers for reference, and after they have become familiar with it, the holder is used only to carry daily specials or changes in prices.

When a pupil has selected his lunch he slides his tray along the cashier's table, past the checker operating the machine. She itemizes the contents of the tray, totals it and tears off the paper which she gives to the customer. This check is then given to the cashier with the payment, and the customer is able to see exactly how much he is paying for each item, something he often wishes to know. A small figure in the left margin indicates the number of foods on the tray.

This itemizing of the tray contents does not slow up the passage of pupils through the counter lines, because the checker is able to keep ahead of the cashier, and it takes her no longer to ring it up than to add it in her head. This is more accurate, also, than mental addition, particularly when so many trays have to be added in the total time of one and one-half hours required for the three lunch periods.

At the end of the serving period the manager unlocks the machines, records the grand total and checks with the cashier's cash. She also takes off the roll of duplicate paper tape which, remaining in the machine, shows all the sales of the day, itemized. If the cash value of the day's sales does not agree with the total machine readings she may make the food distribution chart illustrated. It is not necessary to make this distribution every day, but when it seems advisable to do so, it is worth the time and effort required.

FOOD FOR THOUGHT

Notes of a Nutritionist

• Notes on the educational exhibit at the Boston conference of school food directors as jotted down by Dorothea Nicoll, nutritionist, department of health, Boston, Mass., contain much valuable information for further follow-up and study. They take the form of a personally conducted tour.

"First, let's look at the samples of 'Nutrition and Health Education Through the School Lunch' sent in by the managers themselves. The excellent chart from West Hartford, Conn., covers every function of the school lunch. Who would believe all these points have to be considered! Don't you wish more school people could study this? Hartford also has sent a good study of receipts as influenced by education of the children. And aren't the youngsters' posters attractive?"

"Maine 4-H club girls report on their rural school lunch project, which reached a peak when they served a different lunch every day at the Eastern States Exposition to show their new knowledge. Here are the attractive 'packed lunch' and hot school lunch leaflets of the Massachusetts extension service, too.

"Indian children from Mashpee, Cape Cod, combine a hot lunch, health teaching, etiquette and recipes for mother in an exhibit under the auspices of the WPA and a state nutritionist.

"Lexington, Mass., has a special ceremony for introducing new classes to the cafeteria and starting good lunch habits.

"Shrewsbury, Mass., has a parent-teacher association meeting at which the superintendent, the principal, a teacher, a mother who packs a lunch and one who gives a lunch allowance, and the lunch manager each discuss the school lunch from his own point of view. This is followed by refreshments—a chance to 'go through the line' and choose from the typical lunch set-up.

"Here are some bulletin board ideas, too, charts, food value posters and nutrition notes, and see those fascinating photographic posters from the dairy council sent in by other schools which use them.

"Did you notice the map and cut-outs which tell the story of the Massachusetts school lunch survey? How does your school compare with these figures?"

Only 1 out of 4 had milk

Only 1 out of 5 had fruits or vegetables

Only 1 out of 7 had dark breads

"That colorful food exhibit for parents was planned jointly by the Massa-

NEW **ALL-METAL** PALMOLIVE "MEASURED SOAP" DISPENSER *Specially* **DESIGNED FOR SCHOOLS!**



NON-BREAKABLE, CLEAR-VISION WINDOW

NEW, ALL-METAL RESERVOIR

Gentle Palmolive

BEST of all, the soap is Palmolive...in a special, dry, free-flowing form that bursts into thick, dirt-removing lather in hard or soft water!

Put "Healthful Cleanliness" into practice in your school with this modern soap system. Your C.P.P. representative will demonstrate it to you at no obligation. Or, if you prefer, write to Colgate-Palmolive-Peet Company, Jersey City, New Jersey, for full particulars.

A Better, More Modern System

RIGHT now is the time to bring the washroom equipment in your school up-to-date with the handsome and serviceable new Palmolive All-Metal "Measured Soap" Dispenser!

This new dispenser is made entirely of gleaming chromium plated metal that fits in with other washroom accessories. It is non-breakable...has a clear-vision, shatter-proof window that allows easy check of soap supply. It never needs polishing. Wiping with a damp cloth keeps it bright and sparkling!

Saves Money, Too!

Tests prove that the new Palmolive "Measured Soap" Dispenser provides 100 washes for 1¢...you save as much as 30% to 40% on soap costs! Two operations of the plunger deliver enough Palmolive Soap for one good wash...and the generous-sized reservoir holds enough soap for 300 washes.

PALMOLIVE "MEASURED SOAP"

THE NEW, ECONOMICAL DRY SOAP SYSTEM

chusetts federation of women's clubs, the Massachusetts extension service and the Massachusetts department of public health. It was exhibited for two weeks at Jordan Marsh Company, Boston, in their Family Information Center, and hundreds of leaflets were distributed. It seems to cover all sorts of lunches—at home, the packed lunch, the supplemented lunch, a real boy's meal and the 'slim-sisters'-snack.' The comparison of two lunches—milk, egg salad sandwich and an orange *v.* frankfort, orangeade and candy—has the bargain in food values (the actual cost is the same) effectively shown by colored blocks.

"Would you care to browse through this next section of printed material from the Massachusetts department of public health? For the managers, here are menus and quantity recipes, penny-saving ideas, food cost sheets and the programs of the refresher conferences which are given each summer jointly with the Massachusetts department of education. For the teachers there are sources of teaching units on the school lunch, lists of agencies supplying health materials and actual leaflets for distribution as well as information on nutrition. For the pupils and their parents, here are readable booklets on food, and suggestions for tasty lunches. For any school the privilege is offered of consultation with a nutritionist interested in school lunches.

"We haven't left much time for the school lunch bibliographies or the journals which I am sure you read every month anyway: *The NATION'S SCHOOLS*, *Practical Home Economics* and the *Journal of Home Economics*. That November issue of the *Instructor* has some good school lunch material for the grades, too.

"Now for the recent books. Of course, you own Doctor Bryan's 'School Cafeteria' and many of the regular home economics texts, but have you had a chance to read Prescott's 'Food Technology' yet? 'Food for Fifty' by Fowler and West is new, too. Well, I'll leave you here to enjoy all these old favorites and new friends. I'll see you at the next food service directors' meeting."

Lunch al Fresco

• Eating lunches together out of doors on a bright, sunny day is part of the socializing experience in Grade 1, told by an Iowa City primary teacher, Mable Root, in *Midland Schools*.

If the children are told before they go how to wait for turns in washing, getting drinks and getting served, and are expected to follow a few simple rules that they have helped set up,

the teacher will have something definitely in mind to watch, and if improvement is needed, something to work for on other occasions, she says.

A few days before the trip is taken a pupil council period can be used for making rules. The following rules were made by one class and posted on the bulletin board, and were read frequently before the trip.

RULES FOR LUNCH

1. Wait for your turn to get washed.
2. Get your lunch from the table.
3. Sit quietly while being served.
4. Put papers in the waste basket.

The unusual experience of being out of doors in such a large group in strange surroundings, for a long period of time, is generally stimulating and exciting to children, and it is certainly an evidence of good social adjustment if such rules as these are reasonably well followed by the pupils.

Joint Committee

• Real progress in advancing the standards of school feeding is promised in the establishment of a joint committee of members of the American Home Economics Association and the American Dietetic Association. This group will arrange for sectional meetings to consider school feeding problems specifically. These meetings will coincide with those of the American Dietetic Association and the American Home Economics Association as part of their regular gatherings and will also be held in other sections. They will be similar to the Conferences of Food Service Directors which have been held in the East for the last three years. Arrangements are now under way for a school feeding section as part of the Pittsburgh meeting of the American Home Economics Association scheduled for next June.

Proposed Lighting Standards

NEW lighting standards have been proposed for school buildings by the American Standards Association through recommendations of its sectional committee on standards of school lighting, and

these were adopted in July of 1937.

The table given below shows the 1932 recommended standards (1) mandatory; (2) good practice, and (3) the recommended standards made by the committee last July.

Wiring Capacity — Minimum Wattage to Be Provided for in School Wiring

Minimum Operating Foot Candles*			Location	1937 Minimum Watts per Square Foot
1932		1937		
Recommended		Recommended		
Mandatory	Good Practice	Recommended		
1	2	3	4	5
5	8-12	15	Classrooms, study halls, libraries	4
		15	Offices	4
8	10-15	25	Sewing rooms, drafting rooms, art rooms, and rooms where fine detail work is to be done	7
5	8-12	15	Shops, laboratories	4
3	8-12	15	Gymnasiums — main exercising floor, basket ball, handball, boxing, wres- tling, play rooms, swimming pools	4
2	3-5	6	Auditoriums, assembly rooms, cafeterias and other rooms in which people con- gregate for an extended period but do not use for study	2
1	2-4	4	Locker rooms, corridors, stairs, passage- ways, toilets	1
		30	Sight-saving classrooms	8

*It is recommended that sustained operating levels shall be not less than these values. Higher levels are desirable.

AT THE CONVENTION



C. F. HILLYARD
Vice-President

Be sure to stop at Booths 41-43 at the N. E. A. Convention in Atlantic City. Mr. C. F. Hillyard, Vice-President, will be there to personally greet the many friends of the Midland Laboratories.

This convention, as those in the past, will find the beaming countenance of Mr. A. C. Lyon, Ch. E., who guides the profession on many problems of correct maintenance.



H. H. BRAM

Assisting Mr. Hillyard and Mr. Lyon will be Mr. H. H. Bram and Mr. M. Marks who will give talks and demonstrations on Midland's well-known line of floor-finishes, seals, waxes and cleansers—disinfectants—liquid and jelly soaps—

insecticides — deodorants — and general cleaners.

These products are explained in detail in Midland's latest publication "Progress In Maintenance", if you have not already received a copy—ask for one at Booths 41-43. There is—of course—no obligation. Booths 41-43 N. E. A. Convention. Marlborough Blenheim Hotel, Atlantic City, N. J.



A. C. LYON, Ch.E.



MARTIN MARKS

MIDLAND CHEMICAL LABORATORIES, INC.
DUBUQUE, IOWA

NEWS IN REVIEW

Sexson Is President

John Amherst Sexson, superintendent of schools, Pasadena, Calif., was elected new president of the American Association of School Administrators on first trial of the preferential ballot system, for the election of the presiding officer.

Carroll Reed, superintendent of schools, Minneapolis, was runner-up in this year's poll.

The new amendment instituted at last year's meeting provides for conducting the election of the president by mailing to all of the active members an annual preferential ballot. The first ballot is a primary preferential ballot, which calls for three names designated as first, second and third choices. The names of the five persons receiving the highest number of votes in this primary ballot are then submitted in the final ballot on which the active members indicate their first, second and third choices. The person who receives the preferential plurality in the final ballot is declared to be elected president by the executive committee.

Under this plan no group can control the election at the convention; no one candidate will be favored, and on the whole it is believed to be the most democratic method.

The new president is a former president of the California State Teachers Association, having been superintendent at Pasadena since 1927. He was superintendent of schools at Bisbee, Ariz., from 1924 to 1927, and prior to that, superintendent of schools at Sterling, Colo., from 1912 to 1924.

ADMINISTRATION

For Adult Civic Education

During 1937 the public forums for the further development of adult civic education, sponsored by the U. S. Office of Education, underwent a trial period. Nineteen public forum demonstration centers in both urban and rural communities of nineteen states attracted a total attendance of approximately 1,000,000 people at more than 10,000 meetings.

With one year's experience before it as a pattern, during the remainder of this school year the plan is to conduct short-term demonstration programs in selected centers, usually where a cluster of five or more com-

munities ranging in population from 1,000 to 30,000 makes it possible for residents of several communities in one area to share the time of a competent forum leader and the costs of administration.

To date, definite arrangements have been made for establishing cooperative forum projects in ten states. Approximately \$1,000 has been allocated to each cooperative forum center for forum leadership during the first three-month period, which began January 17.

More Than One Million

Significant of the increase in secondary school enrollments during 1937 was the fact that for the first time high school graduates numbered more than a million for the fiscal year, according to the annual report of the secretary of interior.

A large number of one-teacher schools were abandoned in favor of larger centralized schools, the secretary pointed out. In four years the number of one-teacher schools have been reduced by 10,169 and the number of rural schools offering high school work were increased by 883, but the number of children attending high schools in rural communities were increased 53.2 per cent.

MEETINGS

Conference on School Building

William Lescaze, New York architect, will speak on the subject, "Modern Buildings for Modern Education," and Lee Simonson, scenic designer and member of the board of managers of the Theater Guild, will discuss "The School Auditorium as a Theater" at the ninth annual conference of the National Advisory Council on School Building Problems in Atlantic City February 26. Dr. Arthur B. Moehlman, editor, *THE NATION'S SCHOOLS*, will lead the discussion provoked by the Lescaze paper.

Chairmen of national committees who will give five-minute reports are: H. W. Schmidt, director of school buildings, Wisconsin State Department of Education; Charles J. Calrow, consultant, Virginia State Planning Board; Leonard Power, New York educational consultant; Francis R. Scherer, architect and director of

school buildings, Rochester, N. Y.; Charles Bursch, director, school building division, California State Department of Education; Raymond V. Long, director, school buildings, Virginia State Department of Education; W. F. Credle, director, school building division, North Carolina State Department of Education, and S. P. Clemons, director, school building division, South Carolina Department of Education.

Twenty-First Rotary Luncheon

The Schoolmasters' Rotary Club of the N. E. A. will hold a joint luncheon with the Atlantic City Rotary Club on March 2 at the Traymore Hotel during the meeting of the American Association of School Administrators.

The organization is composed of Rotarian educators from every section of the United States. An annual affair for the last twenty years, the attendance at this luncheon usually numbers from 800 to 1,000.

Supt. David E. Weglein of the Baltimore schools is president; S. T. Neveln, superintendent of schools, Austin, Minn., is secretary-treasurer, and Supt. A. S. Chenoweth of Atlantic City is in charge of the local arrangements. Edgar G. Doudna of Madison, Wis., will speak on the subject "A Schoolmaster Looks at Rotary."

The ticket sale will close at 4 p.m. Tuesday. Tickets may be obtained at convention headquarters and at *THE NATION'S SCHOOLS* booth.

For Childhood Education

"Current Opportunities and Difficulties in Childhood Education" will be the theme for the forty-fifth annual convention of the Association for Childhood Education, meeting in Cincinnati April 19 to 23.

William H. Kilpatrick will address the first general session on "Difficulties That Beset Us," and will participate in other sessions throughout the conference.

PERSONNEL

Rank for Maintenance Men

Five hundred maintenance employees of Columbia University will enjoy sharing the dignity of the institution's academic staff, their salaries and positions being designated according to standards that apply to professors and instructors. Members of the maintenance staff are now assigned to seven groups—administrative, supervisory, clerical, power, upkeep, house guardian and communications. Em-



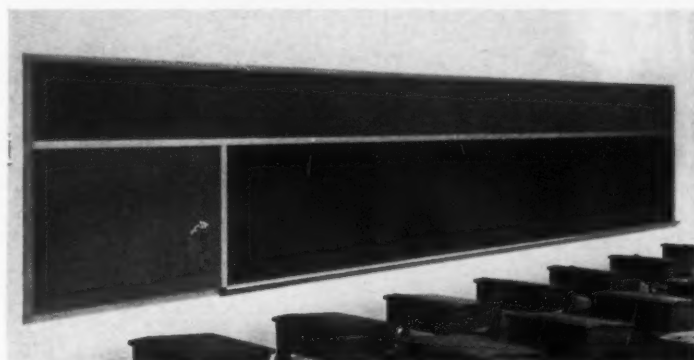
AUSTRAL STRAIGHT 8 ALL METAL WARDROBE



AUSTRAL MULTI-USE BLACKBOARD



AUSTRAL VENTILATING WINDOW



AUSTRAL "GRIPTITE" ALL METAL BLACKBOARD CHALK RAIL AND TRIM

"AUSTRAL"

The hallmark of school equipment. A name that carries the same prestige as the "STERLING" mark on silver.

For over twenty-five years AUSTRAL has been supplying equipment that stands the test of time.

Prominent school Architects specify AUSTRAL products repeatedly due to the fact that they are the work of School Specialists, well designed, rugged, efficient and wholly satisfactory.

Over 3500 schools and colleges equipped during the past twenty-five years is the "proof of the pudding".

Write for descriptive catalogs on Austral Windows, Wardrobes, Multi-Use Blackboards and "Griptite" All-Metal Blackboard Trim.

See Our Exhibit Spaces A-33-35-37.

NATIONAL EDUCATION ASSOCIATION
CONVENTION

Feb. 26th to March 3rd
ATLANTIC CITY, N. J.

AUSTRAL SALES CORP.
101 PARK AVE., NEW YORK CITY

ployees also will enjoy increased security of tenure and stabilization of pay, according to a plan devised by Henry L. Norris, director of buildings and grounds.

Professional Data

Under direction of Supt. Charles Taylor, the Nebraska State Department of Public Instruction is endeavoring to secure and maintain complete personnel records for all teachers in that state. The personnel card will contain a record of the training, certification and experience of the teacher. From the standpoint of the profession, these personnel cards are especially useful. Essential data for actuarial studies in connection with the establishment of a retirement system can be quickly and conveniently obtained from them, as well as data for the study of other professional problems.

RESEARCH

Child Study Service

The department of instruction in the Omaha Public Schools has recently established a Child Study Service, providing an agency that helps children discover their potentialities, their strengths and their weaknesses, and assists them and their parents in making the most of these potentialities. Under the general direction of A. J. Foy Cross, director of instruction, the new service has obtained the services of Prof. W. H. Thompson, educational psychologist and educator of the Municipal University of Omaha. Recommendations for the policies and functions of the Child Study Service come from a special planning committee, the personnel of which consists of teachers, principals, laymen and specialists who sit in a supervisory capacity.

Negro Youth Inquiry

During the last two years the American Youth Commission, which held a two-day executive session in Washington, D. C., during January, has been engaged in a research program relating to the problems of all young people.

"The commission has learned," according to Dr. Homer P. Rainey, director, "that while there is a large amount of data available on such aspects of Negro life as the deficiencies they face in education or the number of cases of delinquency or the rent they pay on houses, there is almost a complete lack of information regarding the inner feelings of the Negro

boy and girl as they encounter problems of race."

For this reason the commission announced it is instituting a study to determine "What Effect the Minority Racial Status of Negro Youth Has Upon Their Personality Development." It will be begun immediately by a special advisory committee. The General Education Board will finance the inquiry through a grant of \$110,000. Two guidance centers will be established for Negro youth.

FINANCE

Philadelphia Closes Normal

Without awaiting protests, the Philadelphia Board of Education recently voted to close the 119-year-old Philadelphia Normal School, effective June 30, as the first step in the board of education's economy program.

The board advanced two reasons for abolishing the normal school, an existing oversupply of teachers for Philadelphia schools and an expected saving of \$242,000 in the next three years. The board arranged to provide \$200 scholarships at Temple University School of Education for the 289 normal school students who will not be graduated in June. They were transferred to Temple January 1 to complete their three-year courses. No new students will be admitted to the normal school this February.

Normal school teachers, all veterans of the system, will be absorbed in high schools and elementary schools. The plant will be used to relieve overcrowding in the Girls' High School and William Penn High School for Girls.

The Philadelphia board of education has been warned by educational lead-

ers against the plan to slash the 1938 budget by \$2,000,000, which leaves Philadelphia only a "bare skeleton" of a school system. Representatives of seventeen school groups of school employees are urging the board to ask Governor Earle to call a special session of the legislature and have it appropriate emergency funds for Philadelphia schools.

Accounting for Pupil Activities

An adequate system for handling high school pupil activity funds is described in an eight-page monograph recently published by Charlotte M. Schaedel of Peterborough High School, Peterborough, N. H. Miss Schaedel has been actuated in offering this accounting system in this form chiefly by numerous inquiries from teachers and school administrators who have learned of its successful operation during the last eight years at Peterborough High School. The nontechnical character of the text, plus illustrative charts, makes it easy to understand.

Modified Salary Schedule

A modified single salary schedule for the school system of Carteret, N. J., was adopted recently by the board of education upon the proposal of C. F. Dengler, supervising principal.

The schedule includes the following provisions:

	No. of		
Years of Training	Mini-	Incre-	Maxi-
	mum	ments	mum
Less than 3	\$1,200	9	\$2,000
Three or over	1,300	12	2,475
	4	1,400	15 2,900
	5	1,500	18 3,300
	6	1,600	20 3,600

The increments amount to \$75, \$100 or \$125, depending upon the number

Coming Meetings

Feb. 10-12—Oklahoma Education Association, Oklahoma City.

Feb. 17-19—International Council for Exceptional Children, Buffalo, N. Y.

Feb. 23-25—National Vocational Guidance Association, Atlantic City, N. J.

Feb. 26-Mar. 3—American Association of School Administrators, Atlantic City, N. J.

Feb. 26—National Advisory Council on School Building Problems, Hotel Ambassador, Atlantic City, N. J.

March 11-12—Junior High School Conference, New York University, New York City.

March 20-22—South Carolina Education Association, Columbia.

March 24-26—Representative Assembly, Michigan Education Association, Lansing.

March 24-26—Alabama Education Association, Birmingham.

March 24-26—Florida Education Association, Tampa.

April 13-16—Kentucky Education Association, Louisville.

April 14-16—Georgia Education Association, Atlanta.

April 16—Massachusetts Teachers Federation, Boston.

April 19-23—Association for Childhood Education, Cincinnati.

April 20-22—National Catholic Educational Association, Milwaukee.

June 6-10—Short Course for School Cafeteria Managers, Oklahoma A. & M. College, Stillwater.

June 13-18—American Library Association, Kansas City, Mo.

June 26-30—National Education Association, New York City.

WELCOME
to the
Finnell Exhibit

Atlantic City Auditorium
February 26—March 3
Booths B-35 and B-37

This is the most complete exhibit we have had at any school convention. A full showing of Finnell equipment, together with waxes, sealers and other floor materials.

*Be Sure to Visit
This Display*



The World's Foremost Foursome for Maintaining School Floors



Presenting the latest improved 100 Series Finnell,—star performers every one! In a small or medium size school, one will do a complete job,—scrubbing or polishing halls, gymnasium and other large areas, with interchangeable brush ring working just as efficiently in the classroom, beneath and around desks and seats. A larger school may profitably use two or more.

Whatever the area or type of your floor, there's a right Finnell to raise cleanliness

standards and cut cleaning costs. Thirty-five types and sizes in addition to those shown. Also specially prepared waxes, including Finnell Kote, the quick-setting hot wax,—and a full line of sealers and fillers, including Gloss Seal in three types, giving just the degree of penetration or thickness of film needed.

Write for illustrated literature and samples of Finnell floor materials. Free demonstration arranged at your convenience. Address Finnell System, Inc., 202 East Street, Elkhart, Ind.

FINNELL SYSTEM **OF FLOOR MAINTENANCE**

of years' experience, not upon the type of position. High school teachers are allowed \$100 per year in excess of the amounts specified in the schedule. Supervisors, principals and special subject teachers are considered individually when their annual contracts are issued.

In making the transition from the old to the new schedule the board has decided to consider losses sustained through the lapse of increments since 1930 as well as the years of experience and the professional growth during the period and consequently to grant increments for the 1938-39 term ranging from \$75 to \$300.

Peak Year Since 1929

College and university funds for education, general and building purposes during 1936-37 registered gains over recent years, according to the U. S. Office of Education report of college receipts and expenditures prepared by Henry G. Badger, associate specialist in educational statistics, and Frederick J. Kelly, chief of the division of higher education.

Of more than 300 higher education institutions reporting practically all of them suffered decreases in receipts from 1929-30 to 1933-34, but their receipts have increased steadily since 1933-34.

INSTRUCTION

A Public School of Aviation

Farmville, Va., has a public school of aviation which is now holding classes in ground instruction. The school has both hangar and shops. Supt. Thomas J. McIlwaine was the first school official in Virginia to ask for a special aeronautic department and his request was granted.

Sex Questionnaire

Twenty Iowa high schools have consented to submit a questionnaire to their pupils regarding their knowledge of sex matters and social diseases at the request of Dr. Walter L. Bierring, Iowa state health commissioner.

Around the Clock

To provide courses for janitors, elevator men, house superintendents and other building service employees who cannot now go to school, the New York City school system is planning to introduce twenty-four-hour teaching schedules. As now planned, the courses will be arranged so that an elevator

man, for example, who works nights one week and days the next will have a school program mapped out for him. This may mean that the schools will be open on a twenty-four-hour basis with classes at 2 a.m., possibly. Type of courses will depend on the demand.

COURT DECISIONS

School Boards Are Exempt

That Iowa school boards, collectively or individually, are immune to liability for damages resulting from injury to persons in connection with the operation and maintenance of public schools and public schools activities appears to be a fairly well established principle of law in that state as the result of recent court decisions affecting school bus drivers.

On December 14 the Iowa supreme court sustained a verdict of \$6,000 against Paul Cushman, a school bus driver, on the grounds that he was an independent contractor and not an employee or agent of the school board. The question of the personal liability of the school bus driver, in view of decisions handed down by the Iowa supreme court, appears to depend upon the relation between the school district and the school bus driver, i.e. whether the bus driver stands in the relation of an independent contractor or in the relation of an employee or agent of the board.

In another case, *Olson v. Cushman*, in which the bus driver was under contract with the school district, the court also held that Cushman was an independent contractor and not an employee of the district.

School districts also are immune to liability for damages resulting from injury to persons who are not employees of the district. Only under the workmen's compensation law is a school district liable for injury to employees while engaged in the discharge of their official duties.

AWARDS

Territorial Contests

The Northwest Territory Celebration Commission has divided the \$20,000 art and essay school competition into three contests, the closing date for which has been extended to April 1.

Lower grade school pupils will compete in art competition only; upper grade school pupils in both art and

essay contests, and high school pupils, grades nine to twelve, inclusive, will prepare essays on subjects specified by the commission. The contest is open only to school children in the states which comprised the old Northwest Territory.

May Day Award

On May Day—the traditional children's day—*Child Life* magazine will present to the man or woman who has accomplished the most in the interests of children during the year 1937 an achievement award. Admiral Richard E. Byrd and Dr. James Rowland Angell will assist a distinguished committee of leading Americans in selecting the outstanding child educator during 1937.

The candidate may be nominated by anyone. He may be a teacher in a backwood's school, an author or a famous educator.

The committee also includes such well known names as: Booth Tarkington, President Ray Lyman Wilbur, S. Josephine Baker, James E. West, Mrs. Frederick H. Brooke, President Lotus D. Coffman, Sidonie Gruenberg, Dr. William Healy, Dr. Charles H. Judd, Katharine Lenroot, Cornelia Meigs, Dr. Paul Schroeder and Caroline S. Woodruff.

PUBLICATIONS

Buffalo's "90,000"

The criticism of some of the more elaborate pictorial school reports that although they are modern in format their copy is still academic does not apply to "90,000 Children in School," the report of the Buffalo public schools, for it has little copy to criticize.

Unlike "All the Children," the report of the New York City superintendent, and "Your Children and Their Schools," the report of the Los Angeles superintendent, both patterned after *Fortune* magazine, "90,000" is patterned after *Life*. Copy is limited to lines under pictures and an explanatory paragraph, sometimes not more than three lines in length, on each page.

"90,000" is thirty-six pages long and traces activities in the public schools from the first day in school through the grades to special instruction in high school.

Publishes Abstracts

Ownership of *Educational Abstracts*, formerly published by Norman J. Powell and Associates, New York, was

The March of TRANE

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Waverly
Weatherby
Weston

KANSAS

Belleville
Bethel
Bigbow
Chanute
Conway Springs
Erie
Fort Leavenworth
Garden City
Goessel
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The attractive Trane Convector, truly the "modern successor to the old cast iron radiator," — as any teacher of heating history will point out, is available in concealed, wall, or floor type models. It's as much a part of the schoolroom interior of today as desks or maps.

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transferred to the national council of Phi Delta Kappa, professional education fraternity, with publication of the November-December number of the magazine by the fraternity.

Paul M. Cook has been named editor, with W. A. Stumpf as associate editor. The editorial board comprises the executive council of Phi Delta Kappa, and includes Ira M. Kline, New York University; Arnold E. Joyal, University of Denver; Francis F. Powers, University of Washington; Allan R. Congdon, University of Nebraska, and John H. Aydelotte, Sam Houston State Teachers College, Huntsville, Tex.

Curriculum Study Handbook

Culminating a two-year study of curriculum problems by an important committee of the Oregon State Teachers Association, the Oregon State Department of Education in cooperation with the association has just released a bulletin of approximately 200 pages on curriculum study.

HEALTH

New York's Lighting Survey

Criticisms of present equipment and the construction and interior decoration of classrooms in New York City schools are embodied in a report based on a two-year survey of school lighting facilities by Dr. Isidore Harry Goldberger, assistant director of health education for the board of education. Nearly three-quarters of the city school children, this points out, are forced to study during most of the academic year under conditions which strain their eyes and consequently retard their mental progress. Both artificial and natural lighting are inadequate according to scientific standards, and the report indicates that the light in different parts of rooms varies so greatly that some pupils are severely handicapped and discriminated against due to the location of their desks.

Among the suggested changes for classrooms to remedy present conditions are: repainting all ceilings flat white and the entire walls some light color; finishing all desk tops with a dull surface to prevent glare; burning electric lights at all times on the sides of rooms away from windows; substitution of 200-watt bulbs for the 150-watt ones now in use; raising light fixtures to a height of 11 feet 6 inches, which was found to be most satisfactory, and using translucent window shades which can be raised from each sash.

Name Social Hygiene Day

February 2 has been designated by the American Social Hygiene Association as "National Social Hygiene Day." The first National Social Hygiene Day last year aroused widespread interest in the control of syphilis and gonorrhea.

TRANSPORTATION

Checking School Busses

The newly created Oklahoma state department of public safety this year is completing a second check-up on all school transportation equipment in that state. Last year the Oklahoma department of education's transportation director made a complete inspection of all school transportation equipment.

The major objective of the inspection program was to obtain accurate information on the condition of every bus used in transporting school children in Oklahoma. Of the 2,414 busses inspected, it was found that 1,535 chassis and 962 bodies were rated as satisfactory; 694 chassis and 797 bodies as average; 174 chassis and 515 bodies as unsatisfactory and 11 chassis and 140 bodies as dangerous. As a result of this inspection program, several hundred thousand dollars' worth of new equipment has been purchased by the 786 transporting school districts in Oklahoma.

NAMES IN NEWS

Superintendents

DR. RUDOLPH D. LINDQUIST, director of University Schools and Professor of Education at Ohio State University since 1931, has resigned his position to become director of the Cranbrook School, at Bloomfield Hills, Michigan. GEORGE T. NICKERSON, acting head of the school since the resignation of Dr. WILLIAM O. STEVENS two years ago, will continue as dean of the school.

DR. C. J. BOWMAN succeeds M. M. KONARSKI as assistant superintendent in charge of the business affairs of the schools of Akron, Ohio. He formerly was principal of Buchtel School, Akron.

MILTON E. COE is the new superintendent of schools at Lebanon, Ore. Mr. Coe had been superintendent of schools at Jacksonville since 1928.

R. A. WILLIAMS, who has been principal of the Flandreau High School, Flandreau, S. D., for the last twelve years, has been elected superintendent, succeeding A. E. MEAD, who resigned

to accept a position at the state university. WILLIAM IRELAND, faculty member, has been elected principal.

FREDERIC ERNST, a member of the New York City school system since 1903, has been appointed associate superintendent of schools. Mr. Ernst takes the place left vacant by the retirement of Dr. JOHN L. TILDSLEY last August.

DR. G. CARL ALVERSON has been re-appointed superintendent of public schools at Syracuse, N. Y., for another six-year term, which began December 31.

CHARLES W. BICKFORD, superintendent of the Lewiston Public Schools, Lewiston, Me., since 1916, has tendered his resignation, to be effective in June. Superintendent Bickford is seventy-two years of age, seven years over the retirement age for the school personnel. He came to Lewiston from Manchester, N. H., where he had been superintendent of schools.

ERNEST L. MUZZALL, superintendent of schools, Toppenish, Wash., has been granted a leave of absence of eight months to enter the graduate school of education at Stanford University to do advanced work in the field of public school administration.

W. A. BASS, who has been Tennessee state commissioner of education for almost a year, resigned to accept a five-year contract as superintendent of Nashville city schools, which became effective January 1.

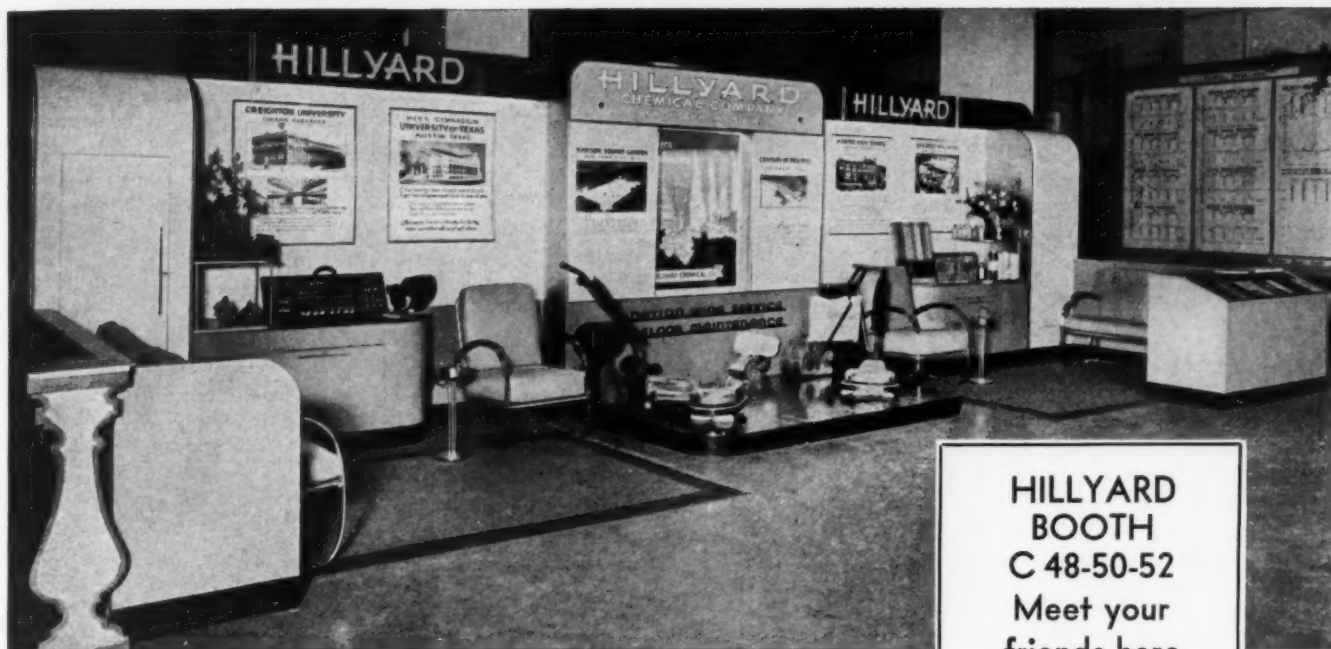
MRS. MARY CLARK of Barre Center, N. Y., has been elected superintendent of the rural school district comprising the towns of Albion, Carlton, Clarendon, Murray, Kendall and Gaines, N. Y., to fill the unexpired five-year term of office held by LUTHER CHADWICK, who served for one year and four months. Mr. Chadwick retired on pension after serving for thirty-five years as a school teacher.

GRAYDON CREWS, a teacher at the Myrtle Point Junior High School, Myrtle Point, Ore., is the new superintendent of the Lincoln Junior High School, Coquille, Ore.

BRIGADIER GENERAL JAY L. BENEDICT has been appointed superintendent of the U. S. Military Academy, West Point, N. Y. He will succeed MAJOR GENERAL WILLIAM D. O'CONNOR, who retires this month.

E. H. HEREFORD, superintendent of public schools, Corpus Christi, Tex., and president of the Corpus Christi Junior College, has resigned because of ill health. M. P. BAKER, principal of the Corpus Christi Senior High School, has been named to serve as acting superintendent for the rest of the year.

CARL PAYNE has accepted the contract as superintendent of schools, Bath, N. Y., and will assume that position in



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September, 1938. Mr. Payne is the present supervising principal of the high school in Holly, N. Y., and formerly served as principal in Mount Morris and Victor, N. Y.

D. H. PATTON, former superintendent of schools at Bellevue, Ohio, has assumed his new position as assistant superintendent of schools at Toledo, Ohio.

Principals

ROSCOE D. SHAFFER, principal of McKinley Junior High School, Muncie, Ind., recently was named principal of Central High School, Muncie, succeeding PAUL F. ADDISON, who resigned to continue his studies.

DWIGHT SHAW DAVIS, principal of Orange High School for nine years, was elected principal of the Leominster Senior High School, Leominster, Mass. He was principal of the Yarmouth High School and taught at East Bridgewater, Athol and Everett before going to Orange.

MARY QUANTRILL has resigned as principal of Oak Grove Elementary School, Dover, Ohio, after being re-elected for her fifty-first year.

DR. STUART H. ROWE, veteran principal of Wadleigh High School, New York City, is to retire at the end of the present term. Doctor Rowe was head of the school for twenty-seven years and has been on leave for the last two years because of ill health.

PRINCIPAL LOUIS P. SLADE of the senior high school of New Britain, Conn., will retire on pension next June at the age of sixty-five years.

MRS. ELLA M. BUDGE has been named principal of Clifton Avenue Grade School, Lakewood, N. J.

CATHERINE L. DOWNES, a teacher at the University Park School, Denver, was named principal of the Stedman School of that city recently. NELLIE V. LIND, former principal at Stedman, was promoted to the principalship of the Washington Park School, to fill a vacancy caused by the retirement of SARAH P. KETNER.

CYRIL POWDERLY of the Stetson High School faculty, Randolph, Mass., has been appointed assistant principal of that school. The position was left vacant by the resignation of JAMES REILLY, who began his new duties as a teacher at Dedham High School, Dedham, Mass., recently.

DANIA KYSOR, veteran Brooklyn educator, has been appointed principal of Central Evening High School, New York. For eleven years Miss Kysor was administrative assistant to Mrs. EVELYN W. ALLAN, principal of the Girls' Commercial High School, Brooklyn. Miss Kysor was the one woman among five principals of evening high

and trade schools appointed by the board of education at its regular meeting. The other four principals appointed were: JACOB FELDMAN, East Side High School; EUGENE B. RILEY, Eastern District Evening High School; ALEXANDER EFRON, Stuyvesant Evening High School, and FREDERICK SIEGAL, Harlem Evening Trade School.

MARY E. LEARY, principal of the Amesbury Street School, and MARY A. MAHONEY, master's assistant at the Gilbert E. Hood School, Lawrence, Mass., were retired on pension recently.

DR. FRANK D. WHALEN, principal of Public School No. 3, New York, has been nominated for the principalship of Elijah D. Clark Junior High School, New York. Approval of the nomination by the instructional affairs committee is tantamount to appointment.

JOSEPH T. MCCORMACK has been appointed principal of Horace Mann School, Jersey City, N. J., succeeding THOMAS AGNEW, JR., who is retiring.

State Departments

DR. L. BLAIR BUCK, Virginia state supervisor of high schools, has been promoted to the directorship of the division of instruction in the state department of education. Before assuming his post as supervisor of high schools, Doctor Buck was state supervisor of Negro education.

ROY LARSON, superintendent of county schools, Koochiching County, Minnesota, has been appointed state supervisor of Indian education, replacing JAMES S. SHIELD.

DR. SIDNEY B. HALL, state superintendent of public instruction of Virginia, was elected president of the state superintendents of schools association recently at its annual convention in Washington, D. C. Doctor Hall succeeds DR. ERNEST W. BUTTERFIELD, Hartford, Conn.

JOHN R. EMENS, assistant state superintendent of public instruction for Michigan, has succeeded DR. LEE M. THURSTON as deputy state superintendent of public instruction. Dr. Thurston has gone to the University of Pittsburgh. G. ROBERT KOOPMAN, coordinator in charge of instruction, has succeeded Mr. Emens as assistant superintendent.

In the Colleges

LUTHER E. FRAZAR, thirty-two-year-old principal of the high school at Merryville, La., has been appointed president of Southwestern Louisiana Institute, Lafayette, to succeed DR. EDWARD L. STEPHENS, who is retiring at the age of sixty-five. Doctor Stephens has been president of the college for

thirty-seven years. Mr. Frazar is a past president of the Louisiana Teachers' Association, and as state representative from Beauregard parish was instrumental in securing passage of the present Louisiana teacher tenure and retirement laws.

DR. RUFUS CARROLLTON HARRIS was inaugurated as tenth president of Tulane University on January 18 at the New Orleans municipal auditorium. The formal exercises culminated a three-day program including a series of symposiums on "Current Trends in University Education." DR. ROBERT MAYNARD HUTCHINS, president of the University of Chicago, was a principal speaker, along with Doctor Harris, at the formal ceremonies.

S. L. SMITH, who retired as the Southern representative for the Julius Rosenwald Fund on January 1, has become director of public relations at George Peabody College for Teachers.

DR. D. W. PETERS, director of the division of instruction of the Virginia department of education since 1931, on January 1 became president of Radford State Teachers College, succeeding DR. J. P. MCCONNELL, who resigned. J. P. WHITT, registrar, has been the acting executive of the institution since November 15.

DR. J. S. CLARKE, president of the Southern University for Negroes at Scotlandville, La., for the last twenty-four years, has retired, and his son, FELTON CLARKE, has been appointed as his successor. The new president is thirty years of age, holds the Ph.D. degree from Columbia University, and in 1936 served as director of the national survey of vocational education for Negroes conducted by the U. S. Office of Education.

NIEL PLUMMER, assistant professor of journalism at the University of Kentucky, has been named acting head of the department of journalism to succeed the late PROF. ENOCH GREHAN.

IRA M. KLINE, formerly supervising principal of the schools of White Plains, N. Y., and for thirty-six years teacher and administrator in New York State schools, has been appointed director of the bureau of appointments in the school of education at New York University.

DR. MORRIS RAPHAEL COHEN, former president of the American Philosophical Association, retired from the faculty of City College, New York, in January.

DR. MARY LOWELL COOLIDGE has resigned as dean of Wellesley College, effective in June. She will not sever her connection with Wellesley, however, for after a year's leave of absence, Doctor Coolidge will return in the fall of 1939 as professor of philosophy.

DR. E. A. HANSEN, professor of elementary education at Ohio University,

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Space Costs Money

The enriched educational program of the modern school requires an extensive physical plant with an increasing burden on tax resources, first, in original construction costs, and second, in the continuing costs of maintaining the larger building with its specialized facilities.

Often the problem presented to school executives is how to provide the facilities essential to an adequate educational program within the limits of a definitely restricted appropriation. In dealing with this problem, the primary fact to be kept in mind is that *SPACE COSTS MONEY*.

The first cost of any building is directly proportional to its cubage. Furthermore, throughout its life cubage influences the maintenance costs of every building, the amount of fuel required to heat it, the cost of repairs, the cost of custodial services.

The problem, then, becomes one of the efficient use of space. School executives are studying prospective classroom schedules to determine any room or special facilities which might be under-used. The educational building must be so planned as to provide for the maximum use of every room without sacrifice of present educational standards and with sufficient flexibility to be adaptable to future change.

To help meet this requirement, DESKOR, the convertible classroom-auditorium unit, was developed. In all sections of the country DESKOR is providing increased pupil capacity in a given area with a decrease in per pupil costs for both construction and maintenance. Savings in building costs frequently *exceed* 25%. Yet DESKOR actually increases the flexibility of the school building and it involves no sacrifice of educational standards. (DESKOR in combination with soundproof folding walls provides *even greater* flexibility and savings).

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Athens, has been released from campus duties for the second semester of this school year to assist in the work of the Ohio State Department of Education in compiling a bulletin of materials fundamental in setting curriculum standards for elementary schools.

DR. RAYMOND HOTCHKISS LEACH was installed as the second president of the College of Idaho, Caldwell, recently. PRESIDENT HARRY M. GAGE of Coe College, Cedar Rapids, Iowa, and PROF. FREDERICK E. BOLTON of the University of Washington were guest speakers at the inauguration ceremonies conducted in January.

Miscellaneous

B. WEST TABB, University of Richmond; RAYMOND C. MAGRATH, treasurer of the University of New Hampshire, and HORACE S. FORD, Massachusetts Institute of Technology, were elected president, vice president and secretary-treasurer, respectively, of the Association of University and College Business Officers of the eastern states area at their recent meeting in Baltimore.

EUGENE R. RITZMAN, research professor of animal husbandry at the University of New Hampshire and interna-

tionally known investigator in the field of animal nutrition, has been appointed a research associate of the Carnegie Institution.

MRS. ZULA E. GRISWOLD, director of public forums, Portland, Ore., has been appointed Pacific Coast representative of adult civic education for the U. S. Office of Education by DR. J. W. STUDEBAKER, commissioner. This appointment designates Portland as a regional office and embraces the area of the Pacific Coast and the Rocky Mountain States. Mrs. Griswold will continue to direct the group of Portland forums.

SUPT. SILAS GAISER of Salem, Ore., was elected president, and BIRDINE MERRILL, classroom teacher of Portland, vice president, of the Oregon State Teachers Association at its thirty-eighth annual convention, December 29 to 31 in Portland.

Deaths

DR. CHARLES R. FOSTER, associate superintendent of schools, Pittsburgh, and for forty years connected with the teaching profession, died suddenly from a heart attack in the Faculty Club lounge of the University of Pittsburgh Cathedral of Learning.

JAMES H. LEONARD, headmaster of the Cambridge High and Latin School Annex, Cambridge, Mass., for the last ten years, collapsed suddenly in his office at the school recently, and was dead on arrival at the Cambridge City Hospital.

DONALD A. WRIGHT, forty-one, Carthage superintendent of the second supervisory school district of Jefferson County, New York, was killed recently when he was struck by a car in a blinding snowstorm.

DR. NORMAN R. WHYTECK, forty-three years of age, superintendent of schools, Glendale, Calif., died recently at the Glendale Sanitarium. He had been ill since October with a rare bacterial infection of the inner lining of the heart. A. L. FERGUSON, assistant superintendent, will assume the superintendent's office pending selection of a successor to Doctor Whytock.

HARRY E. FORTIER, fifty-five, for the last seventeen years superintendent of the Springfield-Lee Union School District, Springfield, Me., died recently.

HAZEL NEWMAN, principal of the elementary school at Paxton, Ill., died recently of heart attack.

ARTHUR L. TODD, principal of Lisbon High School, Lisbon Falls, Me., for eleven years, died recently.

CHARLES A. POWELL, superintendent of schools of Macon County, Missouri, died following an attack of asthma.

WALTER D. HOOD, a member of the Connecticut board of education and for

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nearly thirty years, until he retired last June, principal of the Gilbert School at Winstead, died recently.

CARLTON D. HOWE, former principal of the C. T. Plunkett Junior High School, North Adams, Mass., died recently climaxing an illness that followed a shock about a year ago.

EDWARD T. MARLATT, principal of Hackensack High School, Hackensack, N. J., until last June, died of a heart attack recently in New York.

ANNA KENNEDY, for thirty years principal of McDonough School No. 16, New Orleans, died recently at the age of sixty-seven.

W. W. TUCKER, superintendent of schools, Henry County, Illinois, for ten years, died suddenly of a heart attack.

DR. WILLIAM HAMILTON MACCOLL, president of Kiskiminetas Springs School, a preparatory school at Saltsburg, Pa., since 1930, died at Bradenton, Fla., a month after he had gone there to recuperate from a heart attack.

CHAUNCEY W. SMITH, state superintendent of public instruction for Nevada, died recently at his home in Carson City.

IGNUS HORNSTEIN, assistant director of evening schools, New York, died recently after a month's illness. Mr. Hornstein, in addition to his work on adult education, was an educational director for the WPA.

HOWARD VERNON ALSTON, superintendent of Park City schools, Park City, Utah, for the last sixteen years, died recently after a long illness.

DR. AVERY W. SKINNER, who retired a year and a half ago as director of the division of examinations and inspections, New York State Department of Education, died of a heart attack recently.

BUILDINGS

New York's Plan

A six-year plan providing for sixty-six new schools and 192 replacements has been outlined by Dr. John E. Wade, associate superintendent of schools in charge of buildings, New York. This was presented before a meeting of the delegate assembly of the United Parents Associations. If approved by the board of education, the plan is to be submitted to the city planning commission next August.

Houston's New Campus

The University of Houston, Houston, Tex., now housed in temporary quarters in the San Jacinto High School building, will ultimately have buildings of its own to cost more than

\$1,000,000 on a 110-acre tract, as the result of a decision by the city's board of education to proceed with preliminary plans for construction of a first building, funds for which were offered by the Settegast estate.

Train for Industry

Cuyahoga Heights, Ohio, an industrial village south of Cleveland, has announced plans for a \$425,000 school specializing in the training of youth for industry.

With completion of the building,

graduates will be prepared to accept jobs in one of the large plants that have made the suburb an industrial center and one of the richest school districts on a per pupil basis in that part of the country. Interest will center principally in the class work to be undertaken in the upper grades.

Howard Kleppinger of the American Steel and Wire Company is one of the leaders in the development. Industries of Cuyahoga Heights, including steel, lumber, paint, machine, brick and aluminum plants, are welcoming



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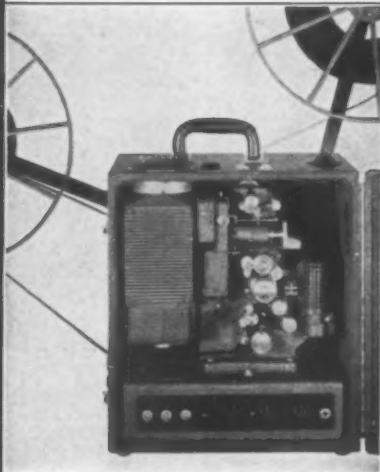
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Adjustable as easily and as quickly as your radio to tone quality for small group work but with plenty of built-in reserve power for large audiences. Clear, steady image projected to any desired size. No complicated threading. Easy on film. Requires no trained operator. Handsome modern case design. Can also be used for silent films. A Universal comes to you complete, ready to operate. No extras to buy. May be purchased on the Universal Budget Plan. See your dealer or write for further details to

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SENTRY SAFETY CONTROL CORP.

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the school and cooperating with school officials in planning the courses.

At the November election voters of the suburb approved a \$500,000 bond issue to cover cost of construction and equipment of a trade school. When actual construction will get under way is indefinite.

Gas Blast Ignites School

The Kingston Township grade school building and its two-room annex at Wilkes-Barre, Pa., were destroyed by fire recently as the result of a gas blast in the chimney of the smaller structure. First reports that one of the steam boilers had exploded were disproved when investigators found both boilers intact. The buildings and their contents were valued at \$65,000. Insurance totaled about \$50,000.

Six-Year High School

More than 1,500 persons, including local residents and state educational leaders, attended the dedication ceremonies of the new \$850,000 six-year high school at Cranford, N. J. The building, begun in December, 1935, has been partly financed by a PWA grant of \$352,000.

Lodging at Maine

Privately owned cabins, constituting a small community known as "Hungry Hollow," have been rented to University of Maine students for several years. This year the university itself has built cabins, by which the administration estimates a student can save from \$125 to \$150 in one year. Six cabins, that will reduce by about half the living expenses of the twenty-two students occupying them, have been constructed. Rent in the cabins is \$1.50 a week. Many expenses incidental to other housing plans are eliminated. Students themselves do most of the work, including cooking, heating and upkeep.

Furnishings consist of double-decker beds, tables and chairs and cook stove for each unit. Each cabin, except for the central one, is occupied by four students, two of whom live in one side of the building and two in the other.

One side of the central cabin is occupied by two student proctors and the other is a shower-toilet-locker room. This half has hot running water and is heated by a central unit in the basement. Each of the two units in each cabin is provided with cold running water and with electric light. Each unit consists of three rooms—a living room, 18 by 15 feet, a small bedroom and a storage room.

Historic Structure Salvaged

What may be the oldest high school structure in the country, erected in 1825 to house the Franklin High School of Philadelphia, was rescued from razing recently. Purchased by the Atwater Kent Foundation, the building, which has served as headquarters for the Franklin Institute for more than a century, will be repaired and then given to the city to be operated as the Atwater Kent Museum. Here will be gathered valuable relics and historic manuscripts which long have been in storage in the basements of Independence Hall and Philadelphia's City Hall or in possession of the Historical Society.

White Blackboards

Because of their aid to seeing and their cleanliness, white blackboards have met with marked approval in the high school at Elgin, Ill. Two types of white board are being used, one of glass and the other of a metal composition. The writing material is an imported pure charcoal stick and the eraser is of a rubber composition.

DISASTER

Fire at 2 a.m.

At 2 a.m. on January 18, boys sleeping in the east dormitory wing of the College of the Sacred Heart at St. Hyacinthe, thirty-five miles east of Montreal, Que., awoke to find themselves surrounded by flames. In the panic which followed many were crushed and left unconscious in the burning building. Many were pushed from the fire escape landing, by the pressure of straining bodies from behind, to the icy ground below. Some, finding escape cut off, leaped from upper windows of the four-story building. When the cry of "fire" awakened the students and teachers, all exits were blocked.

The rambling T-shaped brick building, which was thirty-seven years old, would not permit exploration for bodies for some time after the fire, but when a check-up was made the day following the fire, seventeen persons were known to have died and twenty-seven others were reported missing. In addition, many of the students who fled in their night clothes suffered from exposure in the subzero weather. Fire trucks, ambulances and cars were hampered by deep snow.

Two faculty members and a student from the United States were among the teaching brothers and students missing and four others were among those with serious injuries or burns.

RADIO

Adult School of the Air

To launch during 1938 a series of educational programs for adults in evening hours definitely reserved for that purpose, the Columbia Broadcasting System has formed an adult education board, which met in New York on January 17 and 18. Headed by Dr. Lyman Bryson, professor of education at Teachers College, Columbia University, and also a member of the executive committee of the American Association for Adult Education, the board had before it for consideration the scope and purpose of adult education over the air best fitted to meet the needs of a democracy.

In addition to Doctor Bryson, those who comprise the board are: Stringfellow Barr, president, St. John's College; William Benton, vice president, University of Chicago; Harry Woodburn Chase, chancellor, New York University; Robert I. Gannon, president, Fordham University; Alvin S. Johnson, director, New School for Social Research; Henry R. Luce, president, *Time Inc.*; Mrs. Ruth Bryan Rohde, former U. S. minister to Denmark; Prof. Thomas V. Smith, University of Chicago; George E. Vincent, former president, Rockefeller Foundation; William Allen White, editor, Emporia, Kan.; Ray Lyman Wilbur, president, Stanford University, and Dean Joseph H. Willits, University of Pennsylvania.

266 Colleges Teach Radio

Two hundred sixty-six colleges and universities in the United States and Canada are now offering instruction in radio broadcasting, according to a recent study completed by Prof. Waldo Abbot, director of broadcasting at the University of Michigan. Courses in radio speech were reported in 90 of the institutions covered by the study. Radio writing was taught in 57 colleges; radio dramatics in 53; radio production in 43; radio advertising in 19; education by radio in 17; radio law in five; general broadcasting in 54; broadcasting in speech courses in 78; radio music in 21; technical courses in 88, and television in 13.

Practical Handbook

Preparation of a handbook for amateur broadcasters was one of the important problems tackled by the first Radio Workshop of the Educational Radio Project of the U. S. Office of Education, organized in conjunction with the 1936 summer session of New

IT'S NICE TO HAVE THE USE OF THE SCHOOL AT NIGHT. I'M LEARNING A LOT FROM THESE LECTURES.

YES, AND I'M LEARNING WHY MARY CAN'T GET HER HANDS CLEAN AT SCHOOL. WHY DON'T THEY PUT IN SOME MODERN SOAP DISPENSERS?



Even your budget will welcome these modern soap dispensers

Schools today are playing an increasingly important part in adult education. They are developing rapidly as community centers. Obviously, then, school washrooms and their appointments get more careful scrutiny—more criticism.

That is why progressive schools in increasing numbers are installing Ivory Soap Dispensers. For these modern soap dispensers provide facilities for cleansing face and hands that are complaint proof . . . that win favorable comment from everyone—from pupils, teachers, parents, visitors.

You'll be agreeably surprised to learn how little it costs to provide these dis-

tinctly modern washroom appointments. A postcard or letter will bring you the complete story of Ivory Dispenser service.

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IVORY SOAP DISPENSERS

York University. Out of this six weeks' session grew the original plan and the first rough draft of several chapters of the "Handbook for Amateur Broadcasters." The author, a leader in the field of school broadcasting, is Pauline Gibson, who has rewritten and enlarged the manual for publication under the sponsorship of *Scholastic*. The handbook may be purchased from Scholastic Publications of Pittsburgh.

Contest on the Air

A nationwide contest for the best fifteen-minute broadcast produced and planned by high school pupils is being sponsored jointly by the National Broadcasting Company and *Scholastic*. Programs may include music, drama, talks or variety of entertainment of any kind.

To Institute Radio Bureau

Beginning February 10 a series of weekly radio broadcasts will be instituted by the Chicago Board of Education to carry the dramatization of current news events into the classrooms of the public schools. Harold W. Kent, principal of the Prussing Elementary School, has been appointed director of the radio bureau, and five teachers, three from high schools and two from elementary schools, and two junior clerks have been appointed to assist him.

VISUAL EDUCATION

Cinema Laboratory

A cinema laboratory, originated by Dr. James E. Bliss, assistant professor in the school of dentistry of Western Reserve University, Cleveland, has been organized as a general university service. Any departments may make pictures for instruction, or the university may use this service in promotion by paying the cost of the film used and the preparation of special titles. It is yet to be determined if the cinema laboratory can justify itself as a permanent part of the university.

Experiment Continued

A six months' study with sound films, to determine further their value, especially as compared with silent pictures, was recommended by the New York board of superintendents in a report recently made public.

The report was the result of an experiment on sound films, introduced experimentally a year ago in eleven public schools of the city, in which

it was shown that they have been valuable as a teaching aid, although many defects must be overcome before they are generally accepted in the school system. In the completed experiment, sound films were used to supplement classroom teaching in geography, biology, science and health.

Coordinates Film Centers

With a grant of \$135,000 from the General Education Board for the three-year support of the activities of the Committee on Motion Pictures in Edu-

cation, announced recently by Dr. George F. Zook, president of the American Council on Education, a clearing house of information and activity on visual problems, as they relate to general education, will be established under direction of Charles F. Hoben, Jr., associate in motion picture education.

Work of other film centers will be coordinated under the new plan. It will (1) establish reviewing panels of experts in various educational fields to view and appraise educational films which are now available, and outline

On the Air During February

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time.

Daily

12:30-1:30 p.m. — National Farm and Home Hour (NBC Blue).¹

Monday

2:30-3:00 p.m. — American School of the Air, Exits and Entrances, history and current events for junior and senior high school pupils (CBS).

5:30-5:45 p.m. — Dorothy Gordon, Children's Corner (CBS).

6:15-6:30 p.m. — Explorers' Series, sponsored by the American Museum of Natural History (CBS).

10:30-11:00 p.m. — National Radio Forum (NBC Blue).

10:30-11:00 p.m. — Brave New World, Latin-American program sponsored by the U. S. Office of Education (CBS).

Tuesday

2:00-2:30 p.m. — Fun in Music, band lessons under direction of Dr. Joseph Maddy (NBC Red).

2:30-3:00 p.m. — American School of the Air, American literature alternating with music (CBS).

Feb. 1 — Musicke of Merrie England.

Feb. 8 — Conversation between two eminent authors about Dickens and his works.

Feb. 15 — French Roundelay.

Mar. 1 — The American Student Writes, a round table on "What Constitutes a Good School Paper."

4:30-5:00 p.m. — Stories of Industry, sponsored by the U. S. Department of Commerce (CBS).

5:15-5:30 p.m. — Science Service Series, dramatizing and explaining latest scientific developments (CBS).

5:30-5:45 p.m. — Drama of the Skies, Hayden Planetarium program on astronomy for juveniles and adults (CBS).

6:00-6:15 p.m. — Science in the News (NBC Red).

Wednesday

2:00-2:30 p.m. — Your Health, supplementary material for health teaching in junior and senior high schools, sponsored by the American Medical Association (NBC).

DISEASES OF MIDDLE AGE

Feb. 2 — Rheumatism and Arthritis.

Feb. 9 — Healthy Hearts and Arteries.

Feb. 16 — Don't Fear Cancer—Fight It.

Feb. 23 — Overcoming Diabetes.

2:30-3:00 p.m. — American School of the Air, geography (CBS).

Jan. 5 — The Peasant Kingdom of Roumania.

Jan. 12 — Istanbul, a Decapitated Capital.

Jan. 19 — Pennsylvania Farms, Flowers and Seeds.

Jan. 26 — Tropical Products in New York City.

3:30-3:45 p.m. — Current Questions Before the House, each week a different member of the House of Representatives discusses a current problem (CBS).

4:30-5:00 p.m. — Youth in a Modern Community, sponsored by the radio forum, National

Congress of Parents and Teachers (NBC Blue).

Feb. 2 — Alcohol and Narcotics.

Feb. 9 — Watch Your Step.

Feb. 16 — Through the Years.

Feb. 23 — Why Read?

5:30-5:45 p.m. — Dorothy Gordon, Children's Corner (CBS).

6:00-6:15 p.m. — Our American Schools, sponsored by the N. E. A. to promote teacher welfare and better support for schools (NBC Red).

10:30-11:00 p.m. — U. S. Cabinet Series presenting a different member of the President's cabinet each week (CBS).

Thursday

2:00-3:00 p.m. — American School of the Air, primary music (CBS).

Feb. 3 — Game Songs in America.

Feb. 10 — International Music Programs.

Feb. 17 — International Music Programs.

Feb. 24 — International Music Programs.

3:30-3:45 p.m. — Science Service Series (CBS).

4:30-5:00 p.m. — Education for Living, sponsored by the General Federation of Women's Clubs (NBC Blue).

5:00-5:15 p.m. — Current Questions Before the Senate, a member of the Senate is heard each week discussing a current problem (CBS).

7:45-8:00 p.m. — Science on the March, under auspices of the American Society for the Advancement of Science.

Friday

2:00-3:00 p.m. — Damosch Music Appreciation Hour (NBC Red and Blue).

2:30-3:00 p.m. — American School of the Air, vocational guidance (CBS).

Feb. 4 — Now That We Have It, How Do We Hold It?

Feb. 11 — Quit the Job or Build It Up?

Feb. 18 — Making a Life—Not Only a Living.

Feb. 25 — Share in Vocational Guidance.

5:30-5:45 p.m. — Dorothy Gordon, Children's Corner (CBS).

6:00-6:15 p.m. — Education in the News, dramatization of news items in education by the U. S. Office of Education (NBC Red).

Saturday

10:30-11:00 a.m. — Let's Pretend (CBS).

11:00-11:15 a.m. — Our American Schools, sponsored by the N. E. A. to bring home and school in closer cooperation (NBC Red).

11:00 a.m.-12:00 m. — Cincinnati Conservatory of Music, symphonic and small instrumental recitals of classical and modern music (CBS).

10:00-11:30 p.m. — NBC Symphony Orchestra (NBC Red and Blue).

Sunday

10:30-11:00 a.m. — Music and American Youth (NBC Red).

12:30-1:00 p.m. — University of Chicago Round Table (NBC Red).

3:00-5:00 p.m. — New York Philharmonic-Symphony Orchestra (CBS).

4:30-5:00 p.m. — The World Is Yours, thrilling adventures in the world of science by the Smithsonian Institution (NBC Red).

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After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935)

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FILMOSOUND PROJECTORS *at new low prices!*



FILMOSOUND 138

In especially quiet new two-case model
was \$490 . . . now only \$410

You can now have a genuine Bell & Howell 16 millimeter Filmosound Model 138 sound film projector for less money than ever before! The new two-case model pictured above is now only \$410—nearly 20% under the former price. The compact single-case model is reduced from \$465 to \$385!

These drastic price reductions are made possible because of the popularity of the 138's!

A steady flow of quantity orders from industrial film users and schools, supplemented by an increasing demand from individual motion picture enthusiasts, has so increased our production that these reduced prices are now possible, notwithstanding constant improvement in design.

Filmosound 138 projects both silent and sound films, has reverse lever, projects single-frame "stills," and has speaker-hiss eliminator, which is especially desirable in classrooms. "Floating film" protection, 750-watt lamp, 1600-foot film capacity, and sound volume and picture brilliance adequate for audiences up to 500 are other features of these popular models. Mail the coupon for full details.

NEW HORIZONS, a recently published booklet, will familiarize you thoroughly with the new teaching tool, the educational motion picture . . . with its nature, its applications, its values, the technique of using it effectively, and the experiences of educators who are using it. Send the coupon for your free copy. Bell & Howell Company, Chicago, New York, Hollywood, London. Established 1907.

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areas for needed film production; (2) establish experimental centers in various institutions to study techniques related to the use of films in educational programs; (3) sponsor a series of institutes and conferences in which results of evaluation and experimental activities will be made widely available to teachers and administrators.

Members of the committee are as follows: John E. Abbott, Museum of Modern Art, New York; W. W. Charters, bureau of educational research, Ohio State University; Frank N. Freeman, University of Chicago; Ben G. Graham, chairman, superintendent of schools, Pittsburgh; Mrs. B. F. Langworthy, formerly president of the National Congress of Parents and Teachers, Chicago, and Mark A. May, director of the Institute of Human Relations, Yale University.

Speaking of Safety

A one-reel educational motion picture on child safety in traffic is now being lent elementary schools without charge through the Films of Com-

merce Company, 21 West Forty-Sixth Street, New York. Borrowers, however, must pay transportation of the film from near-by exchanges and return. The film is silent, and available in both 16 and 35-mm. sizes. The film is entitled "Speaking of Safety" and is presented by the visual instruction department of the N. E. A. and is sponsored by the Automotive Safety Foundation and the Highway Education Board.

Life Saving by Film

Among the three new films recently released by the U. S. Department of Agriculture through its extension service are two reels on life saving, available in 16 and 35-mm. sizes, sound. The life-saving film explains how to rescue drowning persons, break "death grips" and resuscitate the unconscious by the Schafer method. Many scenes are taken under water. The other films are "Muddy Waters," a story of land abuse in the Southwest, and "Screw Worms," which explains how to control this livestock pest.

Films for the School Screen

Biology VIII — Marine Life

Under-Sea Life — Exhibits the curious adaptations and habits of selected forms of marine animals: snail, hermit crab, skate, sting ray, shark, remora, sea horse, puffer and sea robin. The film is suited to classes in biology as well as nature study. One-half reel. 16 mm., silent. For rent or for purchase. Teaching Films Division, Eastman Kodak Company, Rochester, N. Y.

Molluscs — The "mollusca" branch of the animal family is a large one. This picture dealing with both land and sea animals in this group shows the oyster, the octopus, the cuttle fish and the snail. 1 reel. 16 and 35 mm., silent. For rent or for purchase. Films of Commerce Company, Inc., 35 West Forty-Fifth Street, New York.

Marine Life — Here is a veritable guide book of the activities that take place under the seas in all parts of the world: (1) marine life along Australia's barrier reef; (2) pearl culture in Japanese waters; (3) weird forms of fish found in Hawaiian waters. 1 reel. 16 mm., sound. For rent or for purchase. Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York.

Fathoms Deep — Study of submarine fauna; shows octopus, conger eel,

starfish, sea anemone. 1 reel. 16 and 35 mm., silent. For rent or for purchase. Bray Pictures Corporation, Educational Department, 729 Seventh Avenue, New York, and Wholesome Films Service, Inc., 48 Melrose Street, Boston.

Marine Life — The corals, life in the depths of the sea, devil fish, umbrella octopus, sea turtle, defenses of the sea, protective devices, trapping big tuna fish. 1 reel. 16 mm., silent safety film. For rent. Bell and Howell Company, Films Division, 1839 Larchmont Avenue, Chicago.

Marauders of the Sea — Sea dwellers preying upon one another; starfish, jellyfish, Portuguese Man O'War ensnaring fish. 1 reel. 35 mm., silent. For rent. Bray Pictures Corporation, 729 Seventh Avenue, New York; H. S. Brown, Inc., 6 North Michigan Avenue, Chicago, or F. C. Pictures Corporation, 505 Pearl Street, Buffalo, N. Y.

Marine Parade — Queer children of the undersea; how their movements affect their safety. 1 reel. 16 mm., silent. For rent. Institutional Cinema Service, Inc., 130 West Forty-Sixth Street, New York. 35 mm., silent. For rent. Bray Pictures Corporation, 729 7th Avenue, New York.

24 foot picture thrown 144 feet with a HOLMES 16 M M. Projector



in a demonstration at Constitution Hall,
Washington, D. C., for a National Institution.

YOU WILL MARVEL AT THE PICTURE QUALITY OF THIS 16mm HOLMES Equipped with Arc Lamp

No auditorium too large. This Holmes Projector is the answer to schools with large assembly rooms, yet having a limited budget. Holmes Projectors have been famous for years for freedom from mechanical troubles. Sold with or without sound equipment which may be purchased and installed later.



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teen hun-
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it an important part of every modern school*

The RCA Victor School Sound System is a vital teaching aid as well as a complete sound amplifying and distributing medium. Gives lessons new life by bringing to one or more classrooms educational, radio and recorded programs, improving students' speech and aiding many other worth while activities.

The system is centrally controlled. As a result, school principal may ad-

dress any or all classrooms, broadcast emergency calls, execute fire drills, announce time signals, talk with individual teachers, or distribute auditorium programs to classrooms.

Above are but a few of the many services this equipment can provide. The free booklet offered below outlines the others. Our school sound experts, familiar with your problems, are available to help you.

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1918 was a remarkable year, even for schools. Many of them closed twice—due to the coal shortage and to the flu. And then the day of the Armistice!

"WASHINGTON" never saw a daily newspaper. The ones he read were weeklies, and the news that they contained was days or perhaps weeks old—a brief quotation from *HISTORIC CURRENTS IN CHANGING AMERICA* that is typical of its modern presentation of the social and economic aspects of American history. This new book for eleventh and twelfth grades is amazingly illustrated, too!

FRANKLIN first suggested Daylight Saving Time. But the law was not passed until 1918—150 years later.

VOCABULARY of less than a thousand words may be enough for a European peasant even today, but many second grade readers have a larger word list. The *WINSTON SIMPLIFIED DICTIONARY FOR SCHOOLS* is an ideal aid in vocabulary building, for its simplified definitions are more easily remembered.

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THE BOOKSHELF

SOCIAL INTERPRETATION. By Arthur B. Moehlman. New York: D. Appleton-Century Co., Inc., 1938. Pp. xiii + 485. \$3.

Organization and presentation for the first time of a completely functional organization of community-school and school-community relationships in interpretation. The cooperative nature of this activity is emphasized with particular stress on the contributions of the teacher. Formalized relations and publicity are subordinated to social relations. Designed both as manual for use within the school and as a text in courses for teachers and administrators.

THE ADMINISTRATION OF FEDERAL GRANTS TO STATES. By V. O. Key, Jr. *Studies in Administration, Volume I, of the Committee on Public Administration, Social Science Research Council.* Chicago: Public Administration Service, 1937. Pp. xviii + 388. \$3.75.

An excellent attempt to evaluate the policy of federal grants to states which, according to the author, have tended to enhance rather than decrease the power of the states. Of real value to the student of public finance.

EARTH LORE: GEOLOGY WITHOUT JARGON. By S. J. Shand. New York: E. P. Dutton & Company, Inc., 1938. Pp. viii + 144. \$1.25.

A geologist writes fascinatingly but simply about the earth and its history; usable for secondary school libraries.

THE BIRDS OF AMERICA. By John James Audubon. Introduction by William Vogt. New York: The Macmillan Company, 1937. Illustrated. Pp. xxvi + 500. \$12.50.

For the first time since their original publication a century ago, the complete set of 500 magnificent Audubon color plates of American birds has been reproduced, unusual in quality, at a price that makes this volume a "must" buy for secondary school libraries and special biology units.

THE COLLEGE OF THE FUTURE. AN APPRAISAL OF FUNDAMENTAL PLANS AND TRENDS IN AMERICAN HIGHER EDUCATION. By Mowat G. Fraser. New York: Morningside Heights, Columbia University Press, 1937. Pp. xix + 529. \$3.75.

Of his production the author states: "The purpose of this book is to meet the needs which these two fields of disagreement (basic policies and methods of determining policies) and confusion in American higher education imply; to appraise the wide range of conflicting

fundamental proposals soundly, and, incidentally, to develop and illustrate a procedure for doing so."

WHEN LABOR ORGANIZES. By Robert R. Brooks. New Haven: Yale University Press, 1937. Pp. x + 361. \$3.

Realistic account of what labor and capital are doing to advance their respective interests, with the generalization that there is a striking parallel between labor and capital leaders. Worth a place in secondary and college libraries.

LIFE LONG AGO. THE STORY OF FOSILS. By Carroll Lane Fenton. Illustrated. A John Day Book. New York: Reynal & Hitchcock, 1937. Pp. x + 287. \$3.50.

The autobiography of things that lived ages ago. Simple, beautifully illustrated and written for the delectation of youth. A book that should find a place in every public school library. Especially suited for upper elementary and junior high grades.

NOTES ON A DRUM. TRAVEL SKETCHES IN GUATEMALA. By Joseph Henry Jackson. Illustrated. New York: The Macmillan Company, 1937. Pp. x + 276. \$3.

Descriptive notes on a fascinating portion of the Americas that is rapidly developing tourist possibilities for American teachers and others.

THE COMMERCE POWER Versus STATES RIGHTS. By Edward S. Corwin. Princeton: Princeton University Press, 1936. Pp. xiv + 276. \$2.50.

An eminent authority points out the inconsistency of certain interpretative trends in our constitutional history, reaching the conclusion that the constitution does confer debated commerce powers upon the federal government.

LABOR'S ROAD TO PLENTY. THE RETURN TO THE AMERICAN SYSTEM OF PRODUCTIVITY. By Allen W. Rucker. Illustrated. Boston: L. C. Page & Company, Inc., 1937. Pp. xxii + 221. \$2.50.

A program developed around the principle of pay-proportionate-to-productivity as a means of solving some of our industrial problems.

THE CHALLENGE OF EDUCATION. AN INTRODUCTION TO EDUCATION. By the Stanford University Education Faculty. McGraw-Hill Series in Education. New York: McGraw-Hill Book Company, Inc., 1937. Pp. xiv + 471. \$3.

A new textbook for first courses in education that merits close examination.

AN INVITATION

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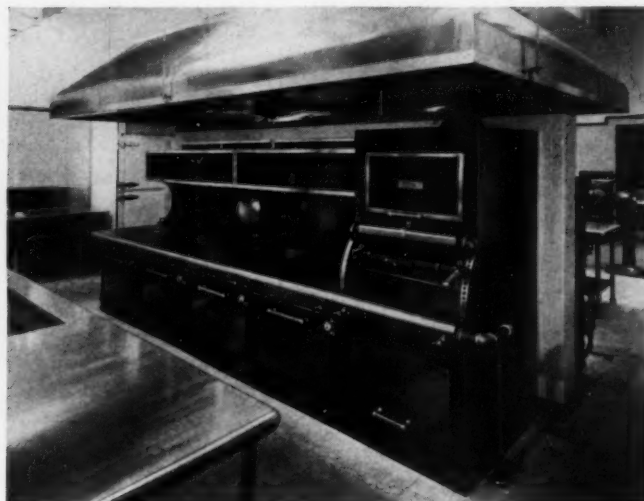
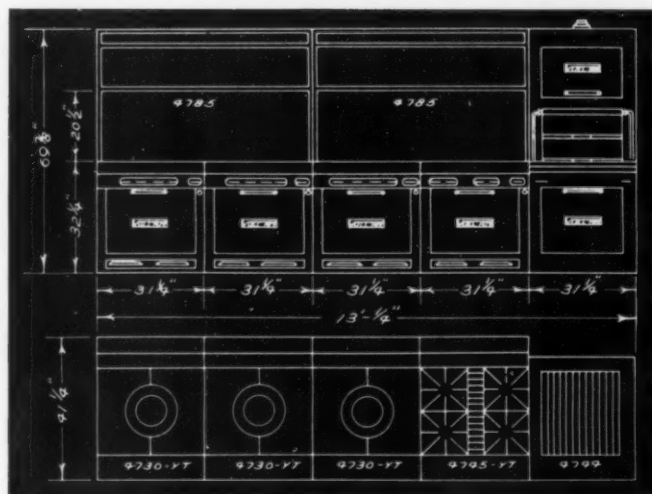
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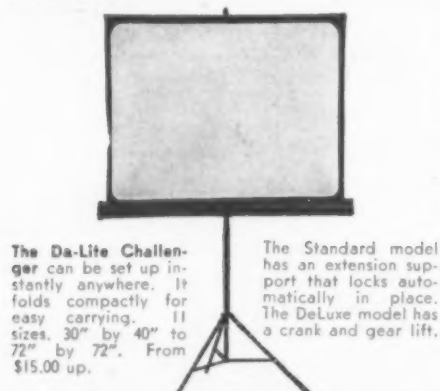
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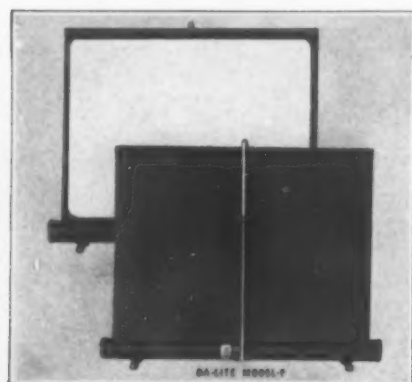
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WHO WERE THE ELEVEN MILLION? By David Lawrence. New York: D. Appleton-Century Company, Inc., 1937. Pp. 79. \$1.

The effect of federal expenditures on the 1936 elections is forcefully demonstrated.

PUBLIC FUNDS FOR CHURCH AND PRIVATE SCHOOLS. By Richard J. Gabel. Toledo, Ohio: De Sales College, 1937. Pp. xiv + 858.

A conscientious and thoroughly scholarly research into the involved question of public aid for private and church schools in the United States that merits careful study by both the historian and administrator in public education. Recommended for college and university libraries.

OVER THE BLUE WALL. By Etta L. Matthews. Illustrations by James Daugherty. Chapel Hill, N. C.: The University of North Carolina Press, 1937. Pp. xii + 328. \$2.

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A STORY OF MUSIC. By Harriot Buxton Barbour and Warren S. Freeman. Illustrated by Martha Powell Setchell and Arthur Lougee. Boston: C. C. Birchard & Company, 1937. Pp. x + 272. \$1.18.

SECRETARIAL ASSISTANCE IN TEACHERS COLLEGES AND NORMAL SCHOOLS. By Luther Jordan Bennett. Contributions to Education, No. 724. New York: Bureau of Publications, Teachers College, Columbia University, 1937. Pp. viii + 86. \$1.60.

LITTLE SAMMY CRICKET. By F. E. Austin. Illustrated by Dorothy M. Jones. Hanover, N. H.: Published by the Author, 1937. Pp. 71. \$0.25 (Paper Cover).

RADIO IN THE CLASSROOM. OBJECTIVES, PRINCIPLES, AND PRACTICES. By Margaret Harrison. New York: Prentice-Hall, Inc., 1937. Pp. xvi + 260. \$2.50.

SCHOOL AND LIFE. By Margaret E. Bennett and Harold C. Hand. New York: McGraw-Hill Book Company, Inc., 1938. Pp. xiii + 185. \$1.24.

GLEE MUSIC FOR JUNIOR HIGH SCHOOL BOYS. For Unchanged, Changing, and Changed Voices. By Robert W. Gibb and Haydn M. Morgan. Boston: C. C. Birchard & Company, 1937. Pp. 67. \$0.68 (Paper Cover).

EARTHQUAKES. By Nicholas Hunter Heck. Princeton: Princeton University Press, 1936. Pp. xi + 222. \$3.50.

Nontechnical contribution for the general reader on the subject of earthquakes and summarizing recent progress in seismology.

TRENDS OF PROFESSIONAL OPPORTUNITIES IN THE LIBERAL ARTS COLLEGE. By Merle Kuder. Teachers College, Columbia University Contributions to Education, No. 717. New York City: Bureau of Publications, Teachers College, Columbia University, 1937. Pp. ix + 102. \$2.35.

WE AND OUR NEIGHBORS. A WELFARE PRIMER. Original Text by Franklin H. Patterson. Prepared by the Buffalo Council of Social Agencies in Cooperation With Community Chests and Councils, Inc. New York City: Community Chests and Councils, Inc., 1937. Pp. 80. \$0.75 (Paper Cover).

ONE HUNDRED GUIDANCE LESSONS. A DISCUSSION MANUAL FOR HIGH SCHOOL STUDENTS. By Frank S. Endicott. Scranton, Pa.: International Textbook Company, 1937. Pp. xii + 236. \$1.25.

GENERAL LANGUAGE. A Course for Junior High Schools. By Lucy M. Bugbee, Elma M. Clark, Paul S. Parsons, Donald B. Swett. Illustrated by Lucretia Malcher and Paul S. Parsons. Chicago: Benj. H. Sanborn & Co., 1937. Pp. xvi + 509. \$1.44.

CURRENT ISSUES IN HIGHER EDUCATION. Edited by William S. Gray. Volume IX, Proceedings of the Institute for Administrative Officers of Higher Institutions, 1937. Pp. viii + 153. \$2 (Paper Cover).

THE NEW LITTLE BOOK. By Marjorie Hardy. Chicago: Wheeler Publishing Company, 1937. Pp. 48. \$0.20 (Paper Cover).

THE NEW WAG AND PUFF. By Marjorie Hardy. Chicago: Wheeler Publishing Company, 1937. Pp. 144. \$0.60.

LIBRARY HELPS. ACTIVITY UNITS IN THE USE OF BOOKS AND LIBRARIES. By R. A. Barmont. Harrisburg, Pa.: Stackpole Sons, 1937. Pp. ix + 80. \$0.24 (Paper Cover).

DANCING DOLLS. ADD-A-PUPPET PLAY SERIES. By Hamburg Puppet Guild. New York: Samuel French, 1937. Pp. 132. \$0.75 (Paper Cover).

THE ADMINISTRATION AND DEVELOPMENT OF THE OKLAHOMA SCHOOL LAND DEPARTMENT. By Oliver Hodge. Norman: The University of Oklahoma, Graduate School, 1937. Pp. xiii + 97.

NEW STORIES. By Marjorie Hardy. Chicago: Wheeler Publishing Company, 1937. Pp. 224. \$0.76.



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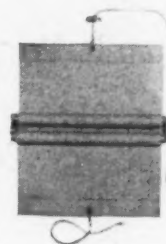
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Small wonder we find such sweet solace in a self-controlled door! A firm that furnishes us with this smooth, nerve-soothing service is the Norton Door Closer Company, 2902 North Western Avenue, Chicago. Politest among people, that concern has gone about gently and quickly shutting doors after us for years on end. The closer we get to these closers the more we think they deserve a citation.

That leakproof lubrication it boasts of is Something. It not only saves friction and wear and tear on the machinery but it oils our squeaking nerve centers until serenity and self-control become a little simpler.

Soothing Syrup

A delusion we are out to shatter—and, inconsistently, we shout it from the rooftops—is that schoolhouses must of necessity be noisy. That unabated between-period violence in the corridors is not a cross, nor is the hum of the classroom a crown of thorns that must be borne in humility by those who elect to serve youth.

Why not silence some of this hubbub before you and the teachers shriek yourselves into laryngitis or a padded cell? We recommend that you have a quiet conference—if there is a place in your building where you can have a quiet conference—with one of the noise control experts of the Celotex Company of 919 North Michigan Avenue, Chicago, for example. Let him make a free acoustical survey of your school.

Then dig up the funds anyway short of bank robbery for acoustical engineering plans for part of the building. Once you have seen what a teacher-saver, discipline-saver and mental-health-saver, reasonable quiet is you'll soon be finding the funds for a more complete job.

Pussyfooting

While campaigning against the Noise Nuisance, Gentlemen, don't forget to silence those spine-shivering shrieks emitted by the common chair

when pushed back from desk or table. One simple treatment, and silence descends.

Darnell does it—with glides. Besides stopping chair-scraping noise, these glides protect the floor from scarring and wear. They have a metal shell surrounding an inside rubber cushion—no need for us to explain when the Darnell Corporation, 36 North Clinton Street, Chicago, will tend to that, if you give it a Chinaman's chance. Ours but to recommend.

Up on Their Toes

Our Chief Scout brings back the news that many up-to-date schools are using their feet to save their hands. They have installed electric hand dryers with foot controls in their washrooms.

The new Sani-Dri, he tells us, is shallower than previous models. This feature makes it possible to install driers in a 4-inch wall and makes the drier more accessible for repairs. A quieter fan and the air intake placed at the bottom of the cover to prevent clogging are other new refinements.

Memorandum to Schoolmen: Have an extra Sani-Dri mounted near the group showers or swimming pool for drying hair. Address the Chicago Hardware Foundry Company, North Chicago, Ill.

Decency at a Bargain

Salvation is free, and the price of cleanliness is only 1 cent per hundred washes. At the price either one sounds like a grand buy.

To get your ablutions so economically, of course, you have to install a "measured soap" dispenser; otherwise, there will be waste. However, the Colgate-Palmolive-Peet Company, Jersey City, N. J., makes it simple for schools by means of a new all-metal dispenser. That stops the breakage, a handicap of the glass dispenser. In the new model a nonshatterable reservoir window in the metal permits the custodial force to check on the soap supply, so no alibi remains for the boy with grubby hands.

Partners in Publishing

Up Boston way Ginn and Company is in readiness for an exceptionally successful year. The first gesture toward making 1938 memorable was to announce that D. D. Grindell and Norman G. S. Ingram have been admitted to membership in the firm.

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*From papers presented at A. A. S. A. convention in Atlantic City, N. J., February 26 to March 3.

THE drama of long effort lies behind and an unlimited future lies ahead of the announcement made by the Federal Communications Commissions on January 26. It told of the assignment of twenty-five ultra-high frequency radio channels for educational use. The challenge of this new frontier in the educational world is the subject of an article for April by Harry A. Jager, consultant in the U. S. Office of Education. Receiving systems now in the schools may be adapted to the new frequencies; relatively cheap adapters will probably be available for home radio sets.

"LET'S Play Safe."

It is our guess that a great many school systems are in the position to be described next month by C. L. Woolbridge, superintendent of buildings for the Pittsburgh board of education.

The school authorities that he tells about thought they had the safest buildings in the entire country. Modern fire escapes, thousands of panic bolts on exit doors, up-to-date fire alarm systems, fireproofed boiler rooms, careful housekeeping practices had been installed in every building.

Then, a few years later, the school board voted the money for a complete safety survey. Astonishment upon astonishment followed. The investigators found fire towers blocked by tools and lumber for the manual training department. Chains and padlocks held some of the doors fitted with panic bolts. Fire escapes discharged pupils into tightly fenced courtyards with locked gates. Steel fire doors between boiler room and corridor were being kept wide open. Costly belt guards on ventilating fans were dismantled.

In a series of twenty-two photographs with accompanying text, Mr.

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Wooldridge presents the right and the wrong, the safe and the unsafe in school equipment.

A POWERFUL factor in the development of taste is the school environment. Mabel Arbuckle, art supervisor in the Detroit public schools, in an article for April will ask that children be allowed to assist in planning color for the schoolroom; in arranging equipment and exhibits for convenient use, and in selecting prints for decorating the school walls.

"WICHITA'S School Beautiful" has won nationwide acclaim. Costing a million and a quarter, including equipment, the Wichita High School North, a Kansas school, perpetuates in memory the Indian, the buffalo and the pioneer through sculpture and color. Architecture and equipment are to be described in the April issue by Principal Grover C. Dotzour.

MORE modest in scale is the elementary school in Jamestown, N. Y., scheduled for presentation next month or in May. The Milton J. Fletcher Elementary School is a community center as well as building devoted to the instruction of children. It has twenty classrooms and an auditorium gymnasium seating 550 persons.

TEACHING must be great fun for Elizabeth R. Balmer of Foxcroft School, Middleburg, Va., and for all of those imaginative men and women who suggest, direct and watch children create, in the flexible type of schoolroom, little worlds of their own. "Fifth-Grade Fantasy," which Miss Balmer, a history teacher, will describe next month, is a medieval project, the making of a village with a Gothic cathedral, half-timbered houses, castellated wall and tournament field. When we finished reading the article, we couldn't decide which would be the happier lot—to be a fifth-grade pupil or a fifth-grade teacher.

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*From papers presented at A. A. S. A. convention in Atlantic City, N. J., February 26 to March 3.

LOOKING FORWARD

The New President

JOHAN AMHERST SEXSON, superintendent of schools at Pasadena, California, since 1927, was chosen president of the Association of American School Administrators by the first use of the preferential ballot method under the new method of election adopted at the New Orleans meeting in 1937. His choice by a total of 1,892 votes may be considered as a vindication by those members who supported the amendment in the hope that the mail vote would not only eliminate personal politics from the annual meeting, but would also produce outstanding leadership by offering more nominations, permitting each member plenty of time for study of candidates, and making possible a greater spread of interest in the election.

Any one of the five nominees, Louis P. Benezet, Manchester, New Hampshire; Ben G. Graham, Pittsburgh; Carroll Reed, Minneapolis; John A. Sexson, Pasadena, California, or James P. Vaughan, Chisholm, Minnesota, would have made an excellent choice.

John A. Sexson is a native of Nebraska who received his professional training in Colorado and had twenty-seven years of teaching and administrative experience in that state before accepting the Pasadena superintendency. He has been active both in state and national professional organizations and is now a member of the Educational Policies Commission. His grasp of the educational problems facing this country is wide and his interests are scholarly. His early advocacy of the six-four-four system of organization stamps him distinctly as a progressive. Our congratulations and best wishes go to him in his professional responsibilities for the coming year.

The President's Committee

PRESIDENT ROOSEVELT'S Advisory Committee on Education, composed of laymen and educators, after sixteen months of effort has completed and forwarded its findings and recommendations to the President of the United States. The outstanding feature of the report as a whole is its recognition of and its recommendations for the improvement of the educa-

tional function through both leadership and financial participation by the federal government. It definitely attempts to reduce some of the inequalities of educational opportunity that now exist within the major submerged areas and recognizes the unique values of the American system without overlooking certain weaknesses that have grown out of this plan.

The report presents a general description and summary of present educational needs. It recognizes realistically that equality of educational opportunity can be progressively achieved not only as the schools are improved but also as the health, manner of living and the economic status of both child and home are changed. Since most of these collateral problems were outside the scope of the committee's work, it merely called sharp attention to them.

Emphasis on improvement of the educational function provides definitely for progressive reorganization of the district system through partial subsidy for capital outlay essential for achievement; professional improvement of state departments of public instruction through subventions for professional personnel protected from the vagaries of partisan politics; improvement in teacher training by providing special aid for teachers' colleges and universities; stimulation of research in education on both a state and national basis; extension of public library service especially in rural areas; stimulation of the essential field of adult education, and heavy emphasis on the need for a rather complete revision of the existing practices and controls in vocational education.

Recommendations for a general aid fund start modestly, to stimulate instead of retarding structural reorganization, and are recommended for distribution to rural areas in which current inequalities are greatest. The report also recommends periodic reappraisal of conditions and need, the first of these to be made in 1942 and 1943 when the returns of the next federal census are available.

The recommendations of the committee were based on intensive research by a staff of specialists of unusual ability. Each specialist surveyed his own area and made his own recommendations. The committee as a whole reviewed both its recommendations and

the information on which they were based, bringing all unit reports together for a complete overview and then prepared independently its own summary report and specific recommendations.

The outstanding contribution of the report is its emphasis on improvement, its reasonable recommendations for progressive achievement and its safeguarding of state and community control of education. As a sane and moderate program representing both lay and professional views, it will probably not appeal completely to several of the educational pressure groups that have been urging immediate federal aid in much larger amounts than the report recommends. Neither will the recommendations concerning the essential reorganization of vocational education be palatable to the group that has developed strong control in this area.

Careful, judicial and nonemotional study of the recommendations is urged upon professional leaders. The totality of these reactions should be of definite value in building a supporting or a dissenting opinion toward the committee's work. Its final professional acceptance as a working policy is now before the teaching profession.

Dangers of Price Buying

PRIce buying of educational supplies has grown to such an extent that its continuation not only threatens the reliable and long established manufacturers but may also have far-reaching effects on the efficiency of instruction. The practice is by no means new but simply has been accentuated by the depression with its need for stretching inadequate dollars and its excessive emphasis on localism in buying.

Practices in public expenditures are and must remain much more conservative than similar practices in private activity. The first requirement is to induce the widest possible competition and to offer the widest possible opportunity to all sellers. The device of advertising for and receiving written bids is essential to public school purchasing. It offers the purveyor an equal chance and it protects the public against the practice of the "favored bidder" when it is honestly and openly used.

The second requirement is to secure a quality of material commensurate with the purpose for which it is to be used. If paper for handwriting with ink is demanded, it must be of a certain grade in surface finish or the ink will not run smoothly. If color is to be taught, the material must represent the color quality required, and not shades. Many a child who has gone through "price buying" schools frequently has difficulty in distinguishing true colors. Standards of quality may be correlated with open bidding by using specific written standards of quality. Each bidder is then forced to bid against the standard instead of against price without regard to quality.

Those educational centers in which the lay board of education exercises no more than its normal functions of planning and appraisal, delegating the responsibility for purchasing on the basis of approved standards, are not attracted by price buying except in emergencies. They have found the practice too expensive. In smaller districts and in rural areas in which the board of education still attempts to perform activities beyond its lay capacity, there exists the greatest amount of price buying.

Apparently emphasis and appreciation of quality are closely correlated with executive professional competence. Elimination of costly price buying will probably be dependent upon the progressive reorganization of small districts into units sufficiently large to afford professional personnel for all aspects of the work.

The Chicago Episode

THE announcement of the Chicago five-year educational plan to reorganize the curriculum of the city senior high schools by a shift in emphasis from the academic to the specifically vocational subjects was sufficiently startling to the educational world to make it front page news. Educational leaders throughout the country, recognizing the utter futility of turning backward upon the vocational educational experience of the last twenty years and the conditioning kaleidoscopic technological changes, were frankly aghast and said so in no uncertain terms. The Chicago Teachers Union, battling vigorously against autocratic control and the undesirable combination of politics and education in the schools, attacked the program vigorously from several significant aspects.

Pieced together carefully from direct and apparently uniform quotations of the superintendent of schools in the daily press, it first appeared that the Chicago plan contemplated the progressive dropping of 80 per cent of the academic work and 50 per cent of the academic teachers. The academic work was to be replaced by a similar proportion of vocational courses and vocational teachers up to 50 per cent. Changes in personnel were to be affected through death, resignation and retirement at the rate of 10 per cent a year. The vocational teachers apparently were to have "temporary status," which would mean abrogation of the tenure or merit system.

Significant changes in the physical plant contemplated the erection of so-called "vocational schools" or factory laboratories in conjunction with each of the thirty-seven high schools. The theory upon which this program was predicated is that large numbers of Chicago's secondary population cannot continue their education and therefore needed preparation for life work given at secondary school level. The second assumption (Chicago announcements always play the economy motif) was that the federal government through Smith-

Hughes subventions would finance a large part of the proposed program and thus "save money." While the first statement had some merit, the second certainly grew out of ignorance of the basis for federal subventions to vocational education.

Organized labor's long and decisive protests bore fruit during the final week in December, and Mayor Edward Kelly, apparently feeling the power behind this protest, took the matter into his own hands and brought the representatives of labor into conference with his own appointed board of education. The upshot of this meeting was that the superintendent backed down on earlier publicity given the plan and claimed misrepresentation by the press. Mayor Kelly himself declared that the superintendent "never had any intention of replacing academic teachers and never intended to revamp the schools to interfere with union apprenticeships." He invited the labor unions to appoint a permanent committee to work with the superintendent and board of education in the development of vocational education.

That the superintendent could have been misquoted by all of the capable Chicago newsgatherers and by all of the Chicago papers seems unlikely. That generally reliable national news services should in similar manner have completely misunderstood the Chicago executive is also most unlikely. Either the Chicago school system is laboring under a misapprehension of what constitutes sound publicity or else the vigorous action of organized labor presaged possible damage to the Kelly political machine and forced a strategic retreat at the expense of some good reporters. Knowledge of the Chicago system indicates that the latter contention is more nearly true.

Whatever the cause, the withdrawal of so drastic, far-reaching and undigested a plan of reorganization of secondary education for a more cautious and rational development of vocational education in greater conformity with current needs has saved the school district of Chicago from making a grave error. If further awakening of civic interest in the schools and Chicago's children results from this front page episode, it may not have been in vain. The vigorous defense of the children's birthright by the Chicago Teachers Union deserves hearty commendation by all educators. It is to be sincerely hoped that it is a sound step in the ultimate separation of schools and politics in Chicago, to the benefit and well-being of the educational process.

For Better Understanding

THE public schools are the concern of all of the people, and the cooperative nature of the American educational pattern indicates increasingly the need for greater understanding of and deeper participation in the work of the schools. One peculiarly delicate area is that of finance. At least once a year each school sys-

tem is confronted by the need for executive preparation of the annual budget for presentation to the board of education. In recent years many of the larger city school systems have adopted the plan of making the budget, a complicated report, intelligible to the people of the community before its actual adoption by the board of education. These methods have varied from simple procedures like that of inviting interested persons or groups to attend budget meetings and of providing special public hearings to the preparation of an illustrated budget not only explaining the work of the school but also breaking down the technical budget into understandable activities and providing for reasonably wide community circulation.

Several city school districts have done excellent pioneer work in this area. As early as 1921 the Detroit schools prepared research bulletins that presented budgets in popular form for the first time. This practice was later discontinued but apparently furnished a stimulus for more advanced efforts. Since the onset of the depression the public schools of Rochester, New York, have printed annually for the community leaders and the teaching profession an illustrated analytic budget that, together with the Los Angeles illustrated budget, represents high spots in community financial reporting. There are numerous other examples of this new type of popular budget which would merit direct mention if we were merely presenting extensive tabulations.

These illustrated budgets start with pictorial and written analysis of the work of the schools and then proceed to graphic description of both income and expenditures. They are so organized that even a casual reading by an ordinarily well-informed layman cannot help but create an unusually definite impression of the extensiveness of the school problem and an appreciation of the relatively low unit expense. Both the Rochester and Los Angeles budgets are excellent examples of sensible financial reporting.

There is, however, definite need for the development of even simpler and shorter reports that will inform not only the leaders but also that greater area of popular groups often mythically described as the average man. The public schools of Hamtramck, Michigan, made some successful ventures into this field before the depression through brief and simple explanations in printed letters to parents. They were sent at regular monthly intervals and contained popular education throughout a semester span. There is great need for deeper and more extensive exploration of this area. Popular understanding of public school finance cannot be created through conventional practices but requires a large amount of hard work in developing the art of popular reporting.

The Editor

Living at Highcrest School

HOWARD A. LANE

UNDER the leadership of Supt. J. R. Harper, the schools of Wilmette, Ill., have long been progressive. They have steadily grown more child and community-centered and have been among the first to adopt modern purposes and procedures. Change has been gradual rather than revolutionary and has come through the study of common

genuinely purposeful child activity is at once the process and the goal of their education.

The building is well adapted to primary work. New and modern, it has an attractive setting with several acres of ground. On the ground floor are five classrooms. In the basement

is a large, well-lighted room which was planned for a combination gymnasium and auditorium. It is used for lunch, games, rhythms and many other activities. A smaller basement room serves as a workshop. There is also a well-equipped kitchen. Unfortunately the classrooms are small, this resulting from the laudable determination of those who planned



A group of primary pupils read together about their favorite animal, the baby panda. Movable furniture makes working together in small groups possible and the interest motive is in accord with the plan to develop the ability to read without pressure.

problems and consequent growth of teachers and patrons.

Within this district the Highcrest School, in an attendance area annexed to the district several years ago, unhampered by habitual educational procedures, offered the opportunity to set up an educative situation in complete harmony with current psychologic and philosophic thought. In Highcrest today children are living together in an environment for children—an environment in which

Pupils are expected to accept the responsibility of caring for all the school pets. Part of the morning routine for this pupil is to give the canary food and water and clean the cage.





At left: A third grade pupil prepares copy for the newspaper on the primer typewriter. Below: Plans for the day are discussed and determined at the opening of school in the morning. The children come to know what writing is through the teacher's help in writing about things that are important to them such as notes to sick children or letters asking permission to visit a dairy.

Above: Artistic abilities and concepts are developed in children through freedom to express their ideas in their chosen materials. The teacher's function is to suggest ways to produce the effects the child wishes to accomplish. Children may work individually or in small groups on some activity in which they are vitally interested.

the building to limit effectively the size of classes. However, the large halls and basement rooms more than compensate for this deficiency.

Proponents of the activity program would call the Highcrest School good. It is not, however, patterned after any existent school or according to directions set forth by any one person. Mr. Harper found himself possessed of certain beliefs concerning the proper functions and procedures of the primary school and set about to find teachers who shared them and were anxious to put them into practice. It has been my privilege to participate with the superintendent and teachers in planning the initial setup, and to watch the development of the children and their activities in the school.

In planning the school certain items of equipment were believed to be essential. Furniture that can be easily moved seemed important. Children, probably more than adults, tire of unchanging placement of furniture. Tables seating four children were provided. It now appears that light-weight tables for two would be more satisfactory. These might be

moved together to provide for larger groups, and yet could be more easily handled by little children.

In each room are large easels with racks for pots of paints always available. Much paper of several sizes is kept in an appropriate rack within easy reach of the youngsters. Each room has a work bench with a vise and simple tools. The workshop contains benches and a variety of tools.

Most important items of school equipment are a primer typewriter and a duplicating machine for producing newspapers, communications to parents and other materials. In each room are several dozen books on many topics and of varied degrees of difficulty. No need was seen to provide more than one copy of any certain book for a classroom. There are simple reference books and dic-





During the library period early in the afternoon children may select books and read alone, they may study globes and maps or tell the teacher or other children highlights of stories they have read.



There are no lectures on table manners at Highcrest. When guests come to lunch the children are not cautioned to be on their good behavior for all are eager to make their visitors comfortable.

tionaries for children who are able to use them. Equipment such as dolls, toys and numerous pieces of apparatus and museum pieces have been added by the children or obtained as children wished or needed them.

School begins at 9 o'clock with the arrival of the bus, which brings one-half of the children. Lunch is served at 11:30 a.m. and is followed by a rest period. The children who go home for lunch return at 1 p.m.; the closing hour is 2:15 p.m.

At the beginning of the school day the larger plans for the day are discussed and determined, lunch orders are taken and written out for the cook. The day is sure to include

much time for exchanging experiences and ideas.

After the period of planning often comes a work period in which children, individually or in small groups, work upon some activity which may be new with the day or which may have gone on for weeks. Activities may include working with clay, paints, crayons, wood, paper; making doll clothes or simple personal garments; enlarging and arranging a museum which has become important to many of the children; planning a play and making costumes and scenery; preparing and publishing a newspaper on the duplicating machine, and mailing copies to points as distant as Florida and

The school bus and the cars of teachers and parents take the children on many interesting trips to see other schools, to libraries, dairies, stores, industries and farms. The school is the community's educational headquarters, but not a great portion of the community can be represented there. The children devote much time to planning and staging little plays. They engage in creative music. Musical groups may include all of the children in the school or just a few. No pleasure transcends the child's joy in seeing a story created by himself set to music and portrayed by the children under his direction. No child must, but practically all do, participate in the musical activities.

California. Since children of primary age have many and fickle interests they pursue a variety of interests rather than large group units extending over a long period of time.

Every day requires the acceptance of real responsibility for routine and emergencies. Pets must be cared for; the cook must have help with her preparation and service of lunch; materials and equipment must be kept in order; the mail must be collected and distributed; parents must be informed about certain activities and invited to help with matters of interest and importance. How else than by sharing and cooperating in the business of living together can desirable social habits develop?



Library time usually takes up the early part of the afternoon. The children may select books and read alone or they may tell the teacher or other children stories they have read. One of the most gratifying of the many fine developments has been the tendency of the little children to find an interesting book and find an older child to read it. Children learn much from one another.

Those responsible for the operation of the school believe that distinctively human characteristics develop through meaningful social experience. The school, then, should be a concentration of the community's cultural resources through which the children participate in social living and come in contact with the best

meaningful and more complete experience.

For example, as the teacher of six-year-olds writes on the board the plans for the day, makes out the lunch order, writes notes to sick children and to children in other schools, prepares letters asking permission to

and relationships in ways to stimulate curiosity and build meanings without being obscure to individuals who have not acquired those meanings.

Children develop artistic abilities and concepts through freedom to use materials to express their own ideas.



Above: All the work of duplicating material for the school newspaper and of mailing the papers to distant points is done by these third grade pupils. At left: Creative music is an activity in which nearly all the children participate. Concepts of musical notation are developed through freedom with the piano and the xylophone and the desire to share creations of melody.

of nature and of culture appropriate to the level of their understandings and interests. The school provides the soil in which social intelligence grows. The social heritage is best assimilated and improved through living in an appropriately planned social environment under the guidance of strong, understanding and sympathetic persons who treat the child as a less experienced equal.

Genuine learning activities are those in which the child pursues purposes which seem to him worth while and which lead to some goal that he himself seeks. The skills to which the schools have long devoted major attention develop through functioning in larger situations which employ them as instruments for more

visit the dairy or the post office, she is helping the children do things that are significant to them. The children come, as they develop and mature in experience, to know what writing is. Ultimately they, too, are writing and reading and no one has exerted the pressure of drill upon them. Drill is not a substitute for insight and understanding.

Concepts of number and relationships come into being through serving useful and genuine purposes as in accounting for the lunch money, telling the milk man the number of white and chocolate bottles to leave, keeping account of room expenditures for items such as food for the pets and paint for the airplanes. The teacher uses a vocabulary of number

In these areas the teacher's function is to suggest ways to produce effects the child wishes to accomplish. The enjoyment and comprehension of music come with joyous experience in listening and performing. The concepts of musical notation develop through freedom with the piano, the small xylophone and similar instruments, and the desire to record and share creations of melody.

Individual differences are cared for by recognition that a child must respond to any situation in terms of his maturity and background. When he can follow the writing of the teacher through symbols, he does so; when he cannot, he follows the matter through hearing, and feels no lack of participation. If he becomes,

with his group, interested in locomotives he finds information in a way meaningful and significant to him; he may ask questions, look for pictures or write to technical engineers, depending upon the level of his ability and the strength of his interest. No one method is more respected than any other.

A child develops desirable character traits as he learns through social experiences that the welfare of the

grade children can count change collected for lunch. Few can write it down in the form of addition. Most of them can read charts in the room on which the teacher has recorded some events or a story developed by the children, but they read little from books. Experience teaches us, however, that these abilities will be much more dependable and meaningful if they develop without pressure, either of rule or motivation. The children

children over getting everything done before the summer vacation.

Nervousness and tenseness, which characterized the youngsters in the beginning, have largely disappeared. This has resulted from the absence of pressure upon any child to do a certain thing in a certain way at a certain time.

The casual observer cannot identify dull or bright children by observing school behavior. Much of the dullness in children results from inappropriate school activities. Certainly the Highcrest children differ in I.Q., but in this school those differences do not determine degrees of satisfaction and respectability. Children of high intelligence quotient are not encouraged to withdraw from reality by gaining satisfactions through reading or figuring better than do other people.

The pupils cooperate with one another and prize individual contributions. It is usual, rather than exceptional, to see older children helping younger ones, rather than increasing their burdens as is so often noted in situations in which mental superiority means increased respectability. Visits of preschool children in the neighborhood delight the children. Four-year-olds may find life meaningful and joyous even with the third grade children.

The children do not feel the pressure of discipline. It is assumed that the child knows his need to go to the toilet or get a drink. The behavior of children does not alter when the teacher steps out of the room. Why have teachers failed to see the meaning of the fact that in the traditional school the older the children the more rigid must be the disciplinary control?

The activities of the school are carried on for their own sake rather than as methods of teaching the three R's more effectively. One day a visitor came upon a group of children making cookies. He puzzled over the situation for a while, apparently seeking understanding of the methods involved. Presently he observed, "Yes, I see. They learn reading by following the recipe and are learning arithmetic through measuring ingredients and counting the cookies." The teacher replied, "No, we are just making cookies."



Lunch is served at 11:30 a.m. and is followed by a rest period. Desirable social attitudes are developed in the lunchroom as the children learn to cooperate in the business of living together. They discover that the group welfare is identical with their own.

group is identical with his own. When a group of children is engaged in a genuinely interesting activity it seriously resents, and usually squelches, any behavior that obstructs progress toward its goal. Probably the essence of good character is foresight of social consequences. The children, for example, are not lectured on table manners and they are not cautioned to be on good behavior when guests come for lunch. However, they have taken great pride in maintaining happy and considerate relationships with one another and are eager to learn the social proprieties suitable for them in making guests comfortable.

Doubtless those reading this description will wonder if the children really are learning to read, write and do arithmetic. Nearly all of the first

of second and third grades are reading, without exception, and many of them pursue material ordinarily not meaningful below the fifth or sixth grade. The third grade children can prepare copy for the newspaper and do all of the work of duplicating it. The skills develop as they serve the children's needs.

At the beginning of the school year, random behavior characterizes the activities of the children. There is much milling about. After a week or two there is an atmosphere of purpose and industry. Idleness is seldom observed.

As the children left school for the Christmas holidays one was heard to remark, "Aw, gosh! Why do we have to take two weeks just for Christmas?" In the spring there has been much concern among the older

Federal Relations

FLOYD W. REEVES

THE stability and success of our democracy cannot be assured merely by the vast material resources of our country. Democracy depends first upon people, and under present day conditions our people are not getting a fair chance to develop their innate capacities.

Local control of education is an essential element in maintaining individual freedom and that diversity of culture that is one of the best guarantees of social stability. But local responsibility for the costs of education cannot provide the equality of opportunity which is also an essential prerequisite for democratic freedom.

To meet this dilemma we are forced to accept the necessity for national grants-in-aid, while we continue to maintain by every possible means local freedom of management. This necessity raises new problems, but none that are insuperable, and none that are so serious as the problem of what to do with millions of citizens who, by the accident of birth, are now deprived of an equal chance for health and knowledge and a training that will fit them to fend for themselves in the swift current of our modern life.

A comprehensive review of educational facilities in this country today leads to the conclusion that certain phases and areas of service present acute problems.

The most serious deficiency is found in the less prosperous rural sections of the country, where local tax resources are wholly inadequate to support a proper system of schools. Both the quality and quantity of schooling in the poorer rural areas are low. Buildings are sometimes mere shacks, sanitary facilities are lacking, schoolbooks and other materials are few and poor in qual-

ity. Throughout the nation, in one-teacher schools, nearly one-fourth of the teachers themselves have never gone beyond the high school.

Public library service is greatly needed in rural areas, where nearly forty million people reside who have no access to public libraries except for the very limited facilities available in the schools.

The results of inadequate education in these regions affect the entire nation. The children in marginal rural areas today will be the citizens of our industrial centers tomorrow. In 1930 one-fourth of America's native born population were living in states other than the state of birth. Furthermore, population migration is chiefly from areas in which educational facilities are the poorest. Of the boys and girls ten to twenty years of age who were living on farms in 1920, 40 per cent had migrated to towns and cities by 1930.

The development of the American secondary schools is one of the most dramatic aspects of American education. There are still several million boys and girls of high school age, however, who are not attending school and are without jobs. Although 70 per cent of the urban youth of high school age were in school in 1934, only 30 per cent of the rural youth of this age were enrolled.

The fact that a large number of boys and girls of high school age are out of school is due in part to a lack of facilities and in part to a curriculum that fails to meet their needs. The curriculums of many high schools are still designed primarily to meet the needs of preprofessional youth. But the vast majority of youth are not and should not be headed toward the professions. They

The chairman of the President's Advisory Committee on Education lists ten essential elements that he believes should be incorporated in legislation providing federal assistance to education in the states

need general education to fit them for citizenship and vocational education to prepare them to enter vocations of a nonprofessional type.

For more than twenty years the federal government has expressed its interest in vocational education through aid to the states. But the federal grants for vocational education, made since the passage of the Smith-Hughes Act of 1917, have involved altogether too large a measure of detailed federal control. The American tradition does not admit the desirability of training a working class apart from a leisure and ruling class. Yet under this federally controlled system there has been an unfortunate tendency not only to separate the vocational subjects from general subjects but to separate the pupils themselves into distinct schools.

Adult education is a special function that is rapidly growing in importance. In part, the need for adult classes arises from the deficiency of the schools of ten or twenty years ago, resulting in the inability of adults of today to adapt themselves to changing requirements for employment. Another factor calling for adult education is the rapid obsolescence of all kinds of factual knowledge in these fast moving times.

At least one-fourth of American youth between the age of sixteen and twenty-four are out of school

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and unemployed. Many of these five million young people have dropped out of school because the curriculum is out of date and holds no interest for them. That is a problem for the schoolmen, a problem which they are attacking but which they have not yet solved. The chief problem of the federal government, however, is the millions of young people who have had to drop out of school because they lacked the clothes, the books or the carfare to allow them to attend. They cannot get jobs because they lack schooling and they cannot stay in school because they lack money.

Should Keep NYA and CCC

Two large scale federal organizations have been created to cope with the youth problem, the National Youth Administration with its program of work projects, and grants-in-aid to students, and the Civilian Conservation Corps with its plan of work camps. These programs have values that should be preserved. They have provided a fundamental attack on the problem of inequality of educational opportunity and have demonstrated that aid to youth can be granted on a work basis with great advantages to all.

The greatest need for federal aid to the states for education is primarily for the purpose of raising the level of educational opportunity where it is now most inadequate. Such grants as are made for this purpose should be based fundamentally upon the proposition that neither the individual states nor the federal government can continue to tolerate conditions under which a substantial number of the citizens of tomorrow receive inadequate preparation for effective living. This means that the allocation of the funds among the states must be made in such a manner that the funds will go where they are most needed. The share of the wealthier states in the grants must be modest indeed if substantial improvement is to be brought about with grants no larger than seems socially feasible under present conditions.

Proposals for an integrated program of six new federal grants-in-aid to the states are summarized in the following statements.

1. Grants for public elementary and secondary education, made primarily for the purpose of raising the level of educational opportunity where it is now the most inadequate.

2. Grants for the improved preparation of teachers and other educational personnel.

3. Grants for school buildings, provided primarily and explicitly for construction in connection with the desirable reorganization of administrative and attendance areas.

4. Grants to improve the service of state departments of education.

5. Grants for adult education.

6. Grants for public library service, provided primarily for the improvement of such service in rural areas.

For a similar purpose, the U. S. Office of Education should be provided with better facilities for research and leadership. This will require an increased budget for the office.

One Fund for Vocational Work

The present federal grants for vocational education in schools of less than senior college grade should be thrown together in one fund which, with few limitations, should be available to the states for all desirable types of occupational preparation. This suggestion is made in the interests of more equitable provision of opportunities for vocational education, of less separatism within the school system and of greater flexibility in state and local school administration.

The U. S. Office of Education should be the federal administrative agency in the case of all these grants. The federal statutes and joint plans relating to all forms of education should reserve explicitly to state and local agencies the administration of schools, the content and processes of education and the determination of the best uses of the allotments of federal funds within the types of expenditure for which federal funds may be made available.

It is suggested that a National Youth Service Administration be established in one of the departments of the federal government to direct work projects and administer work camps for needy unemployed youth and to allocate to educational agen-

cies grants for student aid, principally on a work basis, for youth who desire and are competent to enter on or continue secondary school or college education, but who without financial assistance could not do so. The existing Civilian Conservation Corps should be continued, but it should be reorganized on a wholly civilian basis and with greater emphasis upon educational activities for enrollees; it also should be placed under the direction of the proposed National Youth Service Administration. Whenever feasible the educational aspects of the program of the proposed National Youth Service Administration should be administered by the schools.

With increased federal support there is a danger, which it would be folly to disregard, that federal aid, unless thoroughly safeguarded, may lead to an undesirable measure of federal control. Fear of centralized control is unquestionably one of the major obstacles now standing in the way of further federal assistance to education. To secure some extension of federal support for education without undesirable federal control, certain principles may be set up, the essential elements of which should be incorporated in any legislation providing federal aid to the states. These principles are summarized as follows.

To Avoid Wrong Federal Control

1. The major portion of all federal aid for education should be granted as a general fund for the current support of elementary and secondary education. In order that states and local school jurisdictions may have the necessary flexibility in the development of programs suited to local conditions, the specification of particular phases of elementary and secondary education to be supported from such a fund should be avoided.

2. The major portion of federal aid for education should at all times be granted on a basis which tends to lessen inequalities among and within states.

3. Federal grants for special educational purposes may properly be used to bring about attention to educational matters of special national concern and thus to improve

the educational programs conducted under state and local auspices, but such grants should be considered with great care to see that improved balance does in fact result. The states are the units for the organization of educational programs, and the methods of making grants should avoid so far as possible the overdevelopment of any one phase of a state program at the expense of other phases.

4. The federal government should record its purposes broadly but explicitly, leaving to the states wide discretion and flexibility in the administration of the federal grants, although the grants should be conditioned upon distribution within states in conformity with the general purposes of the grants.

5. The general principle of cooperation between the federal government and the states, without coercion by either party, should dominate legislation providing for federal

grants; but wherever the major purpose of the grants is to bring about progress toward equality of educational opportunity, matching of funds by the states or local communities should not be required. Help is most needed in those areas in which matching would be unjust.

6. In order that local initiative and responsibility may be maintained, all federal action should reserve explicitly to state and local auspices the general administration of schools, control over the processes of education and the determination of the best uses of the allotments of federal funds within the types of expenditure for which federal funds may be made available. The federal government should in no case attempt to control the curriculums of the schools or the methods of teaching to be employed in them. In those fields, however, it should carry on research and make the results available to a wide audience.

7. All federal grants for educational purposes to states maintaining separate schools and institutions for Negroes should be conditioned upon an equitable distribution of the federal funds between facilities for the two races.

8. Federal grants should be used to build up and strengthen existing educational agencies and institutions insofar as they are able to serve important needs, and not to establish competing agencies and institutions.

9. Any system of federal grants as a whole should be consistent with sound fiscal policy and should facilitate progress in tax reform.

10. In view of the extent of existing federal relationships to state and local conduct of education and their probable increase through the years, federal relations to education should be reviewed under especially constituted, appropriate auspices at intervals of not more than ten years.

Amounts of Existing and Proposed Federal Grants for Educational Services
(In Millions of Dollars)

<i>Fiscal Year</i>	1938-39	1939-40	1940-41	1941-42	1942-43	1943-44	1944-45
<i>Existing Grants</i>							
Vocational education.....	\$21.8	\$21.8	\$21.8	\$21.8	\$21.8	\$21.8	\$21.8
Vocational rehabilitation of physically handicapped.....	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Land-grant colleges:							
Resident instruction.....	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Agricultural research.....	6.9	7.5	7.5	7.5	7.5	7.5	7.5
Extension service.....	17.9	18.3	18.4	18.4	18.5	18.5	18.5
Total Existing Grants.....	\$53.6	\$54.6	\$54.7	\$54.7	\$54.8	\$54.8	\$54.8
<i>Proposed Grants as Recommended by the President's Advisory Committee</i>							
General aid to elementary and secondary education.....		\$40.0	\$60.0	\$80.0	\$100.0	\$120.0	\$140.0
Improved preparation of teachers and other educational personnel.....		2.0	4.0	6.0	6.0	6.0	6.0
Construction of school buildings to facilitate district reorganization.....		20.0	30.0	30.0	30.0	30.0	30.0
Administration of state departments of education.....		1.0	1.5	2.0	2.0	2.0	2.0
Educational services for adults.....		5.0	10.0	15.0	15.0	15.0	15.0
Library service for rural areas.....		2.0	4.0	6.0	6.0	6.0	6.0
Cooperative educational research demonstrations, and planning.....	\$1.25	2.0	3.0	3.0	3.0	3.0	3.0
Total Proposed Grants.....	\$1.25	\$72.0	\$112.5	\$142.0	\$162.0	\$182.0	\$202.0

Guidance Expands

GRAYSON N. KEFAUVER

THE term "guidance" and the service to which it refers have claimed the attention of educational workers for more than twenty-five years. Frank Parsons in Boston and Eli Weaver in New York City are credited with initiating the guidance movement in this country. They dealt with vocational guidance giving attention to vocational aptitude, vocational choice, vocational training and vocational placement in the public schools.

This concern with the vocational, with little or no recognition of other phases of life, continued for a considerable period. In fact, the question concerning the scope of guidance still remains a controversial question in guidance circles. Some still contend that vocational guidance includes all that is important in the guidance movement. Others are of the opinion that vocational guidance is only a part of a broader program which comprehends all aspects of living.

The National Society for the Study of Education produced a yearbook in 1924 which carried the title "Vocational Guidance and Vocational Education for the Industries." The title gives a reasonably clear indication of the treatment. It is sufficient here to note that the program is restricted to the vocational part of the educational program.

Pupil Needs Stressed

Since the publication of the yearbook in 1924, there has been much change in educational thought and practice. Social-civic competence, mental and physical health and effectiveness in leisure-time activities have received greater stress in recent years. Pupil needs, pupil goals and pupil interests are being given a position of greater importance in shaping the educational program. The concept of the whole child has

been developed and the total life of the individual is receiving greater stress.

These and other changes in educational thought and practice have brought about changes in the guidance service. There is a close interrelationship between the different aspects of a school program. The guidance service cannot be properly treated without reference to the other phases of the school life. As the school changes in other respects, there is need of change in the guidance service. The question many have raised is, "What is the place of guidance in a modern school program?"

Attempts Answer

The 1938 yearbook of the National Society for the Study of Education carrying the title "Guidance in Educational Institutions" represents an attempt to answer this question. The viewpoint of the committee can best be expressed by quoting from the introduction to the yearbook: "The program of educational institutions has undergone basic change and is in process of still further change. Developments in the nature of instruction and in the conceptions as to what constitutes desirable instruction affect the rôle and the form of the guidance service. The yearbook committee has taken note of the developments in the curriculum, in society, in knowledge of the individual, and in conceptions of education and has treated the purpose, scope and general nature of the guidance service in light of these developments."

The scope of the yearbook will be indicated by listing the titles of the different chapters. They include: "Guidance and Purposive Living," "Appraisal of Student Characteristics and Needs," "Appraisal of Aspects of Student Achievement,"

This movement, initiated more than twenty-five years ago, now claims the services of a specialist with technical training if the school is to function according to present day concepts

"Counseling With Students," "Guidance Through Group Activities," "Orientation of New Students," "Guidance in Personality Development," "Guidance in Transition From School to Community Life," "Guidance and Instruction," "The Staff Needed for the Development of an Effective Guidance Service" and "Vocational Guidance in Foreign Countries." Vocational guidance is recognized in many of the chapters, but it is not isolated for separate treatment.

The contents of the yearbook represent a challenge of the subject-matter oriented educational program. The place of pupil goals is noted in chapter 1 and recognition is given to it throughout the yearbook. These goals include a broad sense of direction as well as more immediate objectives. A second important emphasis in the yearbook is the stress on the development of the "whole child." Knowledge and skills are recognized as important but they constitute only part of the total life of the individual.

The rôle of the teacher and the rôle of the guidance specialist are considered in some detail. The importance of the contribution of the teacher is stressed. There is much that only the teacher can do and the teacher's rôle as instructor will be ineffective if she does not do it. Throughout, however, is recognition of the need of supplementing the work of the teacher by guidance specialists with technical training for the work they do.

Complacency, Farewell

ALEXANDER J. STODDARD

COMPLACENCY is one of the most baffling of all human traits or attitudes. Like the evil spirit in fairy stories, complacency can assume many different forms and shapes. In science, complacency takes the form of superstition, unwillingness to study cause and effect, objection to experimentation, and belief in all the varied forms of witchcraft, ancient and modern. Complacency seizes upon the highest motives of religion and distorts them into intolerance, dogmatism and bigotry. In the area of social relationships, complacency leads to self-patriotism, with its evil offsprings of chauvinism and of international, racial and class hatreds. In human psychology, complacency breeds a satisfaction with the status quo and, like the opiate, lulls the human organism into a sweet tranquility in the midst of strife and storm.

Education is engaged in a continuing campaign, challenging complacency on every front. In fact, education that does not disturb complacency is no education at all.

Two types of people refuse to be complacent. Both are of interest because much of the progress of the world is due to them.

The first group are the crusaders who look out upon what they consider to be the evil conditions of life.

Then there are those other restless souls of an entirely different type who just naturally search for explanations of what happens in the world for better control of their environment, for solutions that work, and for the enthronement of intelligence in place of "the rule of things and words."

These are the men of science who have routed complacency on a thousand fronts through the application of the scientific method of thinking. Frequently, the scientist advances so far ahead, without due regard for the ability of the people to follow, that he is condemned for his very progress. But these are true crusaders who do adapt and apply their

zeal to solutions that will work, and most scientists regard the ultimate value of their discoveries as dependent upon their practical application to service for the betterment of mankind.

It is through the impelling force of the real crusading spirit and the application of the true scientific attitude of thinking that education has accomplished so much in effecting that desirable change which constitutes progress.

Let us now turn to a consideration of some specific relationships of complacency to education. Two years ago, the National Education Association and the American Association of School Administrators established the Educational Policies Commission.

This commission was conceived as an educational agency whose function it would be to take a comprehensive view of American life, with all the sociologic, economic and ethnic factors involved, and to determine the essential functions of education as well as the manner in which these functions could best be discharged. In other words, the commission was to seek not only to determine the best educational procedures and to bring together from all possible sources the best information available from other agencies, but also to present these procedures

and this information to the profession and the public in such a way as possibly to bring about their acceptance and incorporation into actual practice.

Already advance has been made on several fronts. The most urgent need appeared to be to define the functions of education in a democratic society. With the multiplication of governmental services there developed a widespread attempt to reduce education to a status equivalent to that of the many other agencies through which the functions of organized society are discharged.

The commission met this attack with a pronouncement involving Dr. Charles A. Beard's brilliant and effective analysis of the nature and obligations of education in our national life. The demand was made that the schools be accorded freedom from partisan politics and other special-interest controls in order that they might make real in the lives of all, and not a particular part of the people, the purposes and promises of the American democracy.

It was decided that the next cornerstone needed in a complete structure of educational policy was a restatement of educational objectives in terms of the democratic philosophy of life. The attempt is to make a pronouncement of policy in the field of objectives that will challenge the schools of this country to an aggressive and continuing attack on all the forces, both patent and insidious, that seek to undermine or to destroy either directly or indirectly, either immediately or through long-term circumvention, the principles of the democratic way of life and the institutions dedicated to their realization.

The third fundamental area considered by the commission was that of the structure and administration of public education in the United States. Ever since its beginning our educational system has been under local and state control. We have been altogether too complacent con-

Are we in a depression or merely threatened with one? What shall we do when it arrives? The chairman of the Educational Policies Commission asks that we determine in advance the general lines along which schools can meet such emergencies

cerning many conditions that still prevail in connection with this school system: small and inefficient administrative units; poorly organized and administered state departments of education; obsolete tax measures; poorly prepared teachers; obsolete buildings; inadequate playgrounds; meager equipment, and, finally, autocratic administration, with no plan for utilizing the initiative and intelligence of the whole school personnel.

Fundamental to any satisfactory treatment of these and other conditions that hamper the efficiency of the program of the school is adequate financial support. Moreover, the present program should be enlarged to include many services not now possible, such as nursery schools and adequate parental and other forms of adult education.

Although accentuated by the depression, the necessity and the logic of federal aid for education have been argued for many years. However, neither the association nor the Educational Policies Commission agrees with some who advocate federal aid at any price. In a preliminary pronouncement on the subject issued recently by the commission, the following policy is advocated as the only sound and defensible one:

"Legislation having to do with federal support should be based upon scientifically determined measures. . . . Appropriations determined by the needs of the several states in relation to their ability to support education should be turned over to the states without specifying the particular phase or phases of public education to be supported from these funds. No distribution of funds should depend upon the exercise of discretionary authority by any officers of the federal government.

"It is sound policy for the federal government to contribute to the support of education within the several states without seeking to control or to administer the schools or to determine the curriculums of the schools or the methods of teaching employed in them."

A fourth point at which the commission seeks to challenge complacency is concerned with the economic effects of education. The

school program is too generally justified solely on the basis of individual rights and civic expediency. A forthcoming pronouncement will present the tremendous potential economic consequences of effective free public education. It will show that, if the millions of inadequately educated people in this country could experience an educational program deliberately designed to raise living standards, both the production and consumption of economic goods would be increased.

The Educational Policies Commission will issue shortly a monograph on the subject "The Improvement of Teacher Education in the United States," designed to stimulate and accelerate progress in teacher education and to point out next steps commensurate with the advance in other phases of life. The most encouraging and comprehensive study yet launched in this important area is the "Study of Major Issues in Teacher Education" projected by the American Council on Education.

The black clouds of depression again overcast the country and once more unemployment, want and other forms of distress are stalking through the land. Let us turn our attention now to the challenge that depression makes to complacency in education.

The last depression struck education as an earthquake shakes a

building, pitilessly revealing the weak construction and rotting timbers that had hitherto passed unnoticed. The first effect on the schools was to increase their responsibilities. The second was the reduction of the financial resources which make these valuable and much needed services possible. The schools were unable to perform the duties required of them under normal conditions, to say nothing of adding anything to their work.

What are the lines along which we can meet the present or challenge the next depression? In the first place, the American people need to be made aware right now of the difference between retrenchment and economy. Second, they need to know that schools are financed so conservatively that even slight reductions mean weakening or elimination of services.

Third, the teaching profession must act promptly to rally an intelligent public support to the schools. Fourth, the federal government must assume a larger share of the costs of the schools. Fifth, the people must be rallied for discussion of their problems around the community school. Sixth, educational leaders must be ready to fight against selfish interests that attempt to limit the freedom of education, and, finally, they must determine where budget cuts are to be made.

Pupils Grade Themselves

IN SOME of the classes at the Amelia High School, Amelia, Va., pupils are grading themselves at the end of the report period. These grades are averaged from the daily work, the tests and any other work which the teacher has assigned during the period. The grades are handed in by the pupil to the teacher who enters them on her record book, if they are acceptable.

The pupil, however, must convince the teacher that he is worthy of the grade which he gives himself. If the teacher has any doubt about the grade being too high she reserves the right to administer a special examination to allow the pupil to prove

himself. Should the grades be too low, the teacher may raise them.

This practice is not followed until there is a careful explanation of what each of the grades may mean. The old five-point system of grading is used and the pupil has a mimeographed sheet with detailed explanations. Experience has shown that the pupils' grades differ little from the teachers' grades.

The children do not hesitate to give themselves a failing grade when they realize that they have not measured up to the required standard. And when the grade seems too high, the teacher talks the matter over with the pupil, explaining the standard.



To the Friends of Youth

E. E. OBERHOLTZER

THE 1938 yearbook of the American Association of School Administrators is devoted to the subject of the welfare of youth, particularly as it relates to the educational opportunities that must be provided for life in our American democracy. Every civilization has had its youth problems, and the yearbook commission has concluded that the problems of youth today do not differ greatly from those of the earlier civilization, except as they become more deeply involved in the rapid changes of the present day. Youth has always struggled to find a place in the adult world. Obstacles have changed; goals have varied; and wherever progress has been made, some agency has been at work to help youth find their place in their own social and economic environment. This is one of the primary purposes of public education in America.

This yearbook deals with subjects vital to our national welfare and challenges every American citizen who hopes that his nation shall exemplify and maintain a progressively developing democracy as a way of living. It presents the discussions and findings of the commission as a composite of its efforts, results of both individual and group participation. The subjects of the chapters

include: "Overview," "Youth Today," "Dynamic and Life-Centered Curriculum," "Personal Relationships," "Creative Citizenship," "Education for Leisure," "Adjustment and Guidance of Pupils in the Regular Day Schools," "Responsibility of the Public Schools for the Adjustment and Guidance of Out-of-School Youth," "Broadening the Horizons," "Youth Organizations," and "Unifying and Coordinating the Influences Affecting Youth."

"Youth Today" gives a cross section of the status of youth, verified by certain objective data and findings. It helps to answer such questions as the following: Who are the youth? How many are there? How are they distributed with respect to age, nativity, sex and marital status? How are youth occupied? Under what environmental conditions do they strive and live? In what way do poverty and plenty influence the lives of our youth group? How is society aiding youth to find a place in the field of work?

"The Dynamic and Life-Centered Curriculum" should help to harmonize a youth's educational devel-

opment with his fundamental needs and interests, with his social environment and with his whole life career. Six organizing principles are used as criteria for setting up this curriculum. These principles are highly inter-related, each working best only if properly balanced and integrated with the other five. These principles deal with individualization, socialization, integration, specialization, dynamic approach and guidance.

"Personal Relationships" deals with those problem situations of life in which one succeeds or fails according to his ability to adjust and improve his own personality in harmony with his social environment. Workers lose their jobs because they cannot get along with others; marriages succeed or fail, depending upon personal factors that harmonize or disagree. Effective citizenship, social usefulness and personal happiness depend in large degree upon the adjustment of personal relations.

"Creative Citizenship" expresses the hope that the school will re-create its citizenship training, predicated upon the following four goals: (1) to cultivate a deep regard for democ-

racy and an intelligent appreciation of democratic institutions; (2) to develop those qualities of character and methods of action that are of special significance in a democracy; (3) to develop the willingness and the ability to cooperate effectively in a democratic society, and (4) to develop an active interest in and concern for the progressive development of the democratic ideal.

"Education for Leisure" treats, as is timely, of a new conception for the use of leisure. It presents a plan by which the school may join the other social agencies of the community, pooling their combined resources for the development of a well-rounded program of educational and recreational activities for all of the citizens of the community.

"The Guidance and Adjustment of Youth" deals with all youth, both in and out of school, and with the responsibility of the public schools for certain continuing personnel services which will contribute to a solution of various perpetual social problems. Equal educational opportunity for all youth is, in fact, at present merely a daydream. Although our schools have made remarkably rapid growth and progress, yet this fundamental American doctrine of equal educational opportunity for youth is yet to be fully realized.

"Broadening the Horizons" concerns itself with new vistas and opportunities for the self-expression of youth in each successive stage of their gradually developing maturity. Effective leadership, society's protection and society's assurance of security, all become deeply involved in how far and how well the youth are to participate in political and economic organizations.

"Youth Organizations" presents a survey of the leading American youth organizations of record, describing the type of organization, the motives that impel the young people to join, what contribution youth make to the organization, and what the organization does to benefit youth. This survey seems to show that youth are not organized into any one particular movement and that the organizations to which they belong survive largely because of the

personal satisfaction accruing from membership. It is somewhat surprising, and yet of real significance, to discover that the agitation and excitement attributed to the so-called youth movement is largely adult agitation and exists in a small degree among the youth themselves.

"Unifying and Coordinating the Influences Affecting Youth" is devoted to the analysis of these services

and the types of agencies in operation. The problem on which the discussion seeks to throw light is how to unify and coordinate the work of the agencies influencing youth. It is obvious that both governmental and nongovernmental units are concerned, and that there is great variance in relationship among these several units in the different American communities.

Fair Weather Ahead

CHARLES H. JUDD

THE only sound basis for any forecast as to the future of a social institution is to be found in present trends that issue from fundamental causes which guarantee the continuance of these trends.

An examination of the educational system of the United States reveals four major trends that seem likely to exert strong influence on the future of this system. Each of these trends can be traced to historical causes which make it clear that continuation of the trend is inevitable.

First, the administrative units of the educational system are in process of readjustment. The elementary school tends to become a six-year school and to transfer its upper grades to the secondary school. The period that was formerly devoted to elementary education was longer than is now required because school equipment was inferior and teachers were poorly prepared. With the change in elementary schools and improvements in the secondary schools and colleges a series of changes is taking place which can be briefly described as a great extension of secondary education and an extension upward of the college.

Second, the curriculum of the schools, especially of the secondary school, is changing so as to include a variety of types of vocational education and a new form of general education. The so-called liberal arts courses are in fact preprofessional and must be classified as vocational. General education, or education which prepares all young people for

participation in their nonvocational activities, is a largely neglected sphere of education. There is much need of ingenious experimentation to determine how to provide what is needed for general education.

Third, the recent experiences of the depression have revealed the fact that modern society is an interrelated and highly integrated organism in which all parts suffer if any part is neglected. Education is seen to be essential to the wholesome life of such a society. Education is not a privilege which is granted to children but a right. If this right is not accorded to all children society as a whole suffers. The nation as well as the locality is concerned with each child's education.

The fourth trend is one which is in some ways the most important of all. It is the trend toward the solution of educational problems through scientific studies. It is characteristic of present day civilization that appeal is made to science in all spheres of activity.

The freedom of American communities to experiment with methods of teaching and of school administration and the eagerness of these communities to measure the results of their experiments have led to the development of a science of education. While the findings of the science of education are sometimes difficult to interpret and to translate into practice, it still remains true that the hope for the future of education is bright because of the reliance on scientific studies to guide it.

AS A young nation we have made remarkable progress toward supplying qualified teachers for a rapidly expanding school population in an era when social demands on the schools were rapidly changing. Now the school population is gradually becoming stationary in number and henceforth the proportion of adults to children will be greater than ever.

What a tremendous opportunity there is in this situation for larger financial support for the schools! How much better we ought to be able to make them! If we do so it will not be because of the construction of better school buildings or because of the acquisition of modern teaching equipment primarily, valuable as they are, but because of the improvement of our teaching personnel.

No other fact stands out more clearly in our teacher-education situation than the implications of the discoveries in biology, psychology and sociology during the last half-century. These subjects, which are basic to the whole field of education, have not generally been mastered by the prospective teachers and hence translated into schoolroom practice.

For example, much is known today concerning the effects of heredity, disease, malnutrition and normal physical growth on child behavior, but it has not yet affected school practice extensively. Much is known about the mental and emotional development of children and even of the effects of emotional variations in teachers on the children in their classrooms, but our only means of spreading this knowledge to prospective teachers is through a puny course in child psychology. We know a great deal about individual differences in children and how to measure them, but the average teacher has only a smattering of knowledge along this line.

Finally, far more is known today concerning the nature and history of various types of social units, the family, the community, the backward tribe, the modern nation and international life than ever before, but our progress to date in educating teachers who can make clear these implications in American schools is discouraging indeed.

Much of our difficulty in the teacher-education situation lies in the fact that the teacher-education institution, whether state or privately controlled, and the schools to which the new teacher goes, are under two entirely separate administrative organizations. Members of the faculty in the teacher-education institutions are often not in close contact with the schools themselves. Frequently, the local schools of a city or village in which the teacher-education institution is located are not available for practice teaching.

In few instances is there a definite follow-up by the teachers' college of new teachers after they have been graduated. As a result, new teachers must adjust themselves as best they can. Usually they soon leave off a large part of their progressive tendencies and fall into the particular deadly routine characteristic of the system in which they are employed.

Our difficulty is a fundamental one. We are attempting in an institution set apart from the schools themselves and enrolling for the most part immature students to complete one of the most difficult and complicated of educational processes. All of this is essentially wrong. No system can possibly be devised for completing the education of teachers in a brief span of years at either a liberal arts college or a teachers' college. At best it can be, as some one has said, only a safety minimum.

We need to revise our thinking on this problem and make plans accordingly. In the first place, the teacher-education institution should exercise leadership among the school systems of the area in which it is located. It should keep in contact with them constantly and should fertilize them in a variety of ways. Appropriate arrangements should be worked out with local school systems for extensive supervision of new teachers during the first year of employment. In this way observation and practice teaching in the teacher-education institutions and the supervision of beginners in the

Tomorrow's Teachers

GEORGE F. ZOOK

schools become aspects of a continuous process which may be modified to suit the needs of individual student teachers.

The schools are one of society's chief social agencies—but they are only one. In addition to the prover-

The president of the American Council on Education looks to the future when school enrollment will have become stationary and the larger financial support for the schools will go to improved teaching

bial trinity of social agencies, including the home and church, there are today public health services, libraries, clubs, relief agencies, motion picture theaters, recreation services, CCC Camps and public parks, all of which play an important part.

While it seems clear that the schools should become centers around which many of these other activities should be carried on, it is clear that the schools should share responsibility for the total care and development of children with these other social agencies. They cannot do so, however, unless the teachers in the schools have been made fully acquainted with the functions and possibilities of the other social agencies, and unless they learn to cooperate actively with them. The teacher-education program should make ample provision for the prep-

aration of teachers who can and will cooperate with other social agencies.

In all the teacher-education process there is nothing more unsatisfactory than its concluding act, the certification situation. Dean Gildersleeve of Barnard College declared a few years ago that "the general tendency [of certification requirements] seems to be to discourage educated persons from teaching in our public schools. . . . The result is that it seems to be rapidly becoming impossible for graduates of our best liberal arts colleges to teach in the public schools of this country."

Is It Certification at All?

The chief characteristic is that in each state the candidate must show that he or she has amassed a certain number of credits in professional and subject-matter work at an institution recognized by the state department of education. The number and character of these required credits vary from state to state, not because of the essential differences in the educational programs but rather because of the vagaries of state school administrators. Only in an indirect way is the system a certification system at all. It is rather a crude way of identifying those institutions in a state which possess what are regarded as minimum facilities for the education of teachers and which, since the North Central study of standards and secondary procedures some years ago, are now entirely out of date.

[Certification should pertain exclusively to the individual's competence to teach, and not to his persistence in fulfilling time and credit requirements in institutions with the greatest variety of standards. It has been proved over and over again in individual colleges and universities and in professional curriculums that time requirements and particular patterns of college credits are poor and undependable ways of guaranteeing desirable qualities in individuals and professional competence.

For many years now we have been steadily improving our tests for achievement, aptitude and ability, personality rating scales and other facilities for evaluating individual competence and personal qualities. We use these measures increasingly

in industry and in current school practice, but to date we have not been imaginative enough in a single state in the Union to develop a system of certifying teachers that is based squarely on teaching competence. The result is that nowhere can school authorities place much dependence on lists of certified teachers.

Indeed, unless they develop an extensive system of supplementary information about certified applicants, which has been done in a few large cities, but which is not at all feasible in smaller centers, the present process of teacher selection will remain unintelligent and in some instances essentially political in character. We, who pride ourselves on the progress that has been made toward the identification of personal achievement and qualities in our students and the individualization of instruction, should be able to apply the same principles to systems of teacher certification, which will be far more satisfactory than anything we have at the present time.

Training Badly Organized

Although the education of teachers from any point of view—the amount of money involved, the number of persons concerned or the significance of the function—is one of the state's largest and most important enterprises, it is in most of our states badly organized.

In the first place, the state departments of education often have little idea as to the trends in school population or the annual turnover of teachers on which to base an estimate of new teachers needed in the elementary schools or in the various subject matter fields of the secondary schools. Hence, there is little, if any, relationship between the number of teacher-education institutions in a given state and the number of prospective teachers in training and the number of teachers needed.

In the same way the state teachers' colleges and normal schools have been scattered indiscriminately over the rural areas, almost consistently avoiding the larger centers of population, such as Boston, New York City, Philadelphia, Pittsburgh, Cleveland, Chicago, St. Louis, New Orleans, Denver and Portland. Truly

it would seem as if the legislatures in the several states entered into a conspiracy to locate the normal schools and teachers' colleges where the people are not, rather than where they are. The effects of this thoughtless policy have been to confine the enrollment of state teachers' colleges largely to rural youth and to make it difficult for them to prepare teachers for urban schools.

Nevada, Wyoming and Delaware have the advantage of concentrating their entire effort in teacher education at a single institution, the state university. From this simple situation one proceeds all the way to utmost confusion. Iowa has only one separate state teachers' college. Wisconsin, with only a slightly larger population, has ten (including the university). In about one-half of the states, the land-grant college, which usually prepares teachers in agriculture and home economics, is separated from the state university. In most of the southern states there have been established state colleges for women, largely engaged in preparing teachers, which are separate from the state university, the land-grant college or the state teachers' college. The same is true of all the land-grant colleges for Negroes in the seventeen border and southern states.

What Should Be Done

In certain states, as for example Kansas, Iowa and Oregon, the teachers' colleges are governed by the same board that controls the state university and the land-grant colleges. In other states, such as Texas, Virginia, California and Michigan, the state board of education governs the state teachers' colleges but exercises no jurisdiction over the state university or the land-grant college.

The conclusion to this matter is plainly the fact that the several states should study their respective situations in teacher education, make estimates of the number and types of new teachers needed, lay down the general pattern for their preparation, assign responsibilities to the respective institutions and provide for coordination among them; in short, provide a unified system of teacher education which will be both comprehensive and effective.

A plan for obtaining teamwork among the teachers is offered to the administrator who does not fear loss of power and personal prestige.

NO EXECUTIVE needs to be told that in every social undertaking cooperation is essential to success. Whenever men work together to achieve a common aim—from a league of nations to a football team, from a great corporation to a class party—the greater the degree of teamwork, the more efficient the achievement.

So it has come about that, as the world's attention has been focused more and more sharply upon the social aspects of individual, national and international life by the interdependence created by modern conditions of living, cooperation has become a word to conjure with. Dictators compel it, presidents appeal for it, the press blazons the term in headlines, and more and more frequently it appears in the ordinary conversation of the man on the street.

School executives are no exception to the general rule: they seek cooperation from their staffs. Teachers, too, demand cooperation from the children. Parents are even suggesting that cooperation be taught in the schools. Cooperation here, cooperation there, cooperation everywhere, but what is cooperation and how is it to be secured? Such questions serve to silence the many voices and reveal the immaturity of our general thinking.

Few, so far, have reached that stage of development where one seriously and systematically studies the situation and makes intelligent plans to control the elements that make for success. Yet what is the rising tide of clamor for cooperation but evidence of a great need for this very thing?

All is not well in our social affairs. The tension between capital and labor steadily increases, the President



Getting Cooperation

S. A. COURTIS

and Congress work less and less harmoniously together. Everywhere one finds more evidence of conflict and disunion than of harmonious cooperation. What school administrator, for instance, has not had his anxious moments these last few years over the growing aggressiveness of teachers and teachers' organizations and their stiffening resistance to complacent acceptance of executive orders?

The truth of the matter is that old forms of cooperation are not acceptable under modern conditions of working together; the depression has released new forces that must be reckoned with. A new spirit is developing in the underdogs of every human struggle.

Cooperation used to mean, "You help me carry out my plan." The

school executive was regarded as a leader; it was his right and function to plan for all; the teacher's part was to do as she was told. We live in a democratic country and teach democratic ideals, but until recent years democracy has never been taken seriously as an ideal to be applied to school activities.

Insecurity is a potent stimulus to reflective thinking and today individuals on every level, school administrators as well as teachers, are asking of each new proposal, "What does it mean?" in terms of personal security and welfare. Democracy preaches the inalienable right of every individual to participate in decisions that affect his life and his liberty.

The rise of dictatorships and of fascist control have made many view

with deep-seated distrust the autocratic character of conventional administrative and political action in this country. The curb on "freedom to teach" is becoming more easy to recognize as a violation of "freedom of speech" and a threat of worse to follow. Most important of all, when one begins to reflect on such matters, especially if one is moved to action, one soon develops a feeling of overwhelming impotence. One individual is absolutely powerless even to make his protest felt, much less to right a wrong.

What can a teacher do but join with others in organizations that can fight for neglected rights impersonally and with power? The greater the power of a protective organization, the more it commands the loyalty and support of those it protects. Membership in a powerful protective organization is a great stiffener of individual resistance.

Plenty to Worry About

Today administrators have plenty to worry about. From above they are subjected to pressures and pulls from the dominant political and industrial organizations that see in schools and education both a threat to their own security and an effective means of social control. From below there is evidence of a growing unrest and a sullen distrust of administrative motives and actions. Is the time coming when administrators will be forced to take sides in a class struggle for power?

One element of the situation stands out clearly. In times of stress and emergencies, in times when one is trying his best to find a solution to a difficult problem, it is human nature to lose patience with unreasoned opposition and to act impulsively, autocratically, because one has power and feels responsible. Such incidents do not lessen the growing tension.

There is a way out, the democratic way. Democratic cooperation recognizes two phases to cooperation: the creative or legislative phase, and the action or executive phase. During the creative phase, all individuals are equal. Each contributes the products of his creative thinking and these contributions are pooled and plans made by group decision. The executive acts as a coordinator

only, not as a leader or as one having authority. Each individual participates in reaching decisions and the decision of the group is not a decision of a "higher up" but the reasoned decision of one's own colleagues. The labor is divided and the various parts are assigned to each by the group according to fitness.

Once the plan is made, however, the conventional machinery functions but on a slightly changed basis. The executive now gives orders and directs action as usual, but acts, not on his own initiative, but as the agent of the group. He simply puts into effect the plan upon which all have agreed, and collects the evidence that measures the effects of action. At the next group meeting, this evidence supplies the stimulus to further group planning.

It is surprising, sometimes, how the suggestion of a small change will serve to reveal the true state of affairs. Many administrators, considering for the first time democratic cooperation, see only loss of power and personal prestige. All such persons are at heart fascistic autocrats, holding their positions possessively and exploiting teachers for their own advancement. They have no real professional concern for the good of education as a whole and no willingness to contribute to a common cause. They are the ones who, either knowingly or unwittingly, have by their past actions brought about the present state of affairs and are likely to suffer most if teachers ever come to power.

Administratorless Schools?

Already suggestions have been made for administratorless schools in which affairs are managed by a teacher selected to represent the group for a limited time or by a committee of teachers. Certainly, the existing strained relationship cannot continue indefinitely.

On the other hand there are superintendents who have already seen the handwriting on the wall and have begun to make the changes necessary to put democratic cooperation into effect. The democratization of administration, of supervision and of instruction is well under way.

It should be recognized, of course, that the shift from the traditional

to the progressive point of view in administration is not an easy one to make. It involves change in fundamental concepts and relationships, the use of the known techniques of cooperation and the development of new ones. Most important of all, such changes require both time and systematic experimentation and training. It is at this point that the administrator has the greatest opportunity to function as a leader. When dealing with the immature, leadership takes the forms of stimulation and guidance. Administrators better than any other agents can initiate new programs of democratic cooperation and guide teachers toward proficiency in the exercise of their new powers.

Seven Essentials

To secure democratic cooperation, it is essential:

1. That administrators acknowledge that, at present, from the teachers' point of view, teachers have no word in decisions that affect vitally their personal security, professional advancement and conditions of work.

2. That administrators recognize teachers as human beings, who are capable of thinking creatively about administrative problems and will gladly do so if given the opportunity.

3. That unity of aim be regarded as worth the time and effort that must now be expended to secure it.

4. To believe that knowledge of and training in specific techniques of democratic cooperation contribute to efficiency.

5. That present executives realize that, because of the prevalence of traditional views of leadership, they are especially obligated to initiate experimental attempts to modify existing practices.

6. To recognize that repression is a fruitful source of evil tendencies while free expression of grievances and participation in worthwhile activities are potent to dissipate disruptive tendencies.

7. That administrators take notice that the transitional era into which we have been plunged by the depression has brought to school administrators an opportunity to make a vital contribution not only to the profession but to the world as well.

Junior College Common

M. M. CHAMBERS

CONSIDERATION of the future of the junior college in the United States is complicated by the fact that this institution in its present stage occupies a somewhat equivocal position, both with regard to its place in the educational structure and to the methods by which it is controlled and supported. Is the junior college an institution of higher education or is it a part of the American system of secondary schools?

It is common knowledge among educators, but too little known among the general public, that the instruction given during the first two years at our standard four-year colleges and universities is in fact secondary education. Real university work does not begin until the junior year. The period of secondary schooling actually occupies about eight years, extending from the seventh grade through the sophomore year in college. This is comparable to the practice in other countries. In France the secondary schools, known as *lycées* and *collèges*, require seven or more years for completion.

In America the period of secondary schooling is broken and distributed among three or more institutions: the upper years of the elementary school or the junior high school, the four-year high school or the three-year senior high school, and the first two years in college or university or the junior college. If our urban communities and rural regions are ambitious to offer their youth facilities for a complete secondary education, it will be necessary to establish local public junior colleges to offer the two years of instruction beyond what is now offered by the high school. There are already some 200 local public junior colleges in operation. But there are also more than a score of two-year junior colleges wholly supported and controlled by certain states in the same manner as the state universities, and

there are 300 junior colleges under private control in the same manner as the nonstate colleges and universities.

Probably the existence of the last two types of junior colleges has much to do with the persistence of the erroneous notion that the junior college is an institution of higher education. Each of the state and private junior colleges has its useful place,

Is the junior college an institution of higher education or is it a part of the American common school system? One court has said "No" to the latter, but indications are that future developments will reverse that decision

but one may hazard the guess that if junior college attendance is to come within the reach of the majority of American youth, it will come by way of the addition of two years of further instruction in the local public school system. The local public junior college probably stands on the threshold of an expansive destiny.

By 1931 no less than fourteen states had expressly authorized the establishment of such institutions by statute, and in some other states they had been put into operation without statutory authority and without apparent legal obstacle. The authority of a city board of education to establish a junior college as part of its public school system without statutory permission was tested and upheld in the supreme court of North Carolina in the Asheville case, which will one day become famous. The cold clutch of the depression halted

the enactment of permissive statutes, not to be resumed until 1935, when South Carolina joined the parade. More recently a special legislative session in Kentucky has enacted a statute which is now to be noted.

This law authorized city boards of education to establish junior colleges and required the city council to levy a tax of between 5 and 7 cents per \$100 valuation for junior college purposes when requested by the board of education. The board of education of the city of Ashland proceeded with plans to acquire a site and construct a building by a method of financing which has become common among school districts in Kentucky and has been approved by the courts. A private nonprofit organization known as the Ashland Junior College Corporation was formed, to issue \$40,000 in bonds and construct the building and rent it for one year to the board of education at a rental sufficient to amortize the bonds over an extended period. The board would have an option to renew the lease from year to year and would receive title in fee simple after the amortization was completed. Meantime it would pay the expenses of insurance and maintenance.

A taxpayer's injunction suit was brought to stop the plan, the principal contention being that the authorizing statute was invalid because it conflicted with section 184 of the Constitution of 1891, which stipulated that "no sum shall be raised or collected for education other than in common schools until the question of taxation is submitted to the legal voters, and the majority of the votes cast at said election shall be in favor of such taxation; provided, the tax now imposed for educational purposes, and for the endowment and maintenance of the agricultural and mechanical college, shall remain until changed by law."

The question before the court was clear: if the local public junior college could be considered a "common school," the statute would stand; if

not, then at least that part of it which authorized a tax levy without a vote of the people would be invalid.

The court studied the debates in the constitutional convention and correctly concluded that there had been a controversy there between the friends of "common school" education and "higher education," the latter group being the friends of the teachers' colleges and the agricultural and mechanical college which later became the University of Kentucky. It was evident that the section quoted above had first been written by the common school advocates, and that its proviso clause had been later inserted to save the agricultural and mechanical college. Sensing the spirit of this fifty-year-old controversy, the court concluded that "the term 'common schools' had and has a fairly definite signification, and, whatever else it may include, it does not include a college."¹

This conclusion was felt to be compelled by the canons of constitutional interpretation, though the court did not overlook the fact that as early as 1909 one of its own decisions had expressly declared: "The city schools, including high schools, are part of the state's common school system."² And the school code of 1934 specifies: "A 'common school' shall be interpreted as meaning an elementary and/or secondary school of the Commonwealth supported in whole or in part by public taxation."³

Possibly recognizing that this statutory definition might be capable of being construed to include local public junior colleges, the court was careful to say that the meaning of the constitution cannot be changed by legislative fiat. The pertinency of this statement may be open to question, in view of the fact that the constitutional meaning of "common school" is not defined in the document itself, and therefore might be said to have been left open for progressive definition to fit the needs of later times.

It is true that state constitutional provisions are in legal theory not grants of power to the legislature,

but limitations upon the undefined general powers of that body. Nevertheless there is room for the thought that the constitution of a state in the broad sense, including not only the text of the historic document but also the whole system of principles and practices which in time become attached to it by such means as judicial interpretation, legislative elaboration and the extra-legal customs of successive generations, need not necessarily be held forever strictly within the concepts that may be presumed to have been in the minds of the long-deceased authors of the original draft of the principal document at the time it was drawn.

The Kentucky court, though holding unconstitutional and void that part of the junior college statute which authorized a tax levy without a popular vote, stated that it saw no reason why other parts of the act should not stand, and pointed

out that the city council has authority to call a popular election on the issue of the tax levy under its general grant of power from the legislature. Therefore the decision is not to be regarded as definitely prohibiting the establishment of local public junior colleges by Kentucky cities.

May it not be expected that, despite the temporary setback resulting from the present interpretation of a provision that is peculiar to the Kentucky constitution, the local public junior college may soon become recognized as a part of the common school system in the United States? Such a development would be but a repetition of what occurred with respect to the American public high school, which was defined as a part of the common school system under similar circumstances two generations ago in the famous Kalamazoo case in Michigan and in a chain of like decisions in several other states.

How Traffic Injuries Are Avoided



A junior judiciary or children's traffic court is operated by public school pupils of Hamtramck, Mich., as an adjunct to an organized school-traffic patrol system maintained by boys. There are twelve courts, one for each school, where weekly sessions are held.

Pupils charged with reckless walking, hitching to vehicles or other infractions of the rules of safety, are "summoned" to court to confront the complaining "officer," and his witnesses in a courtroom filled with interested young spectators. Special tasks or the temporary withdrawal of play privileges are punishments most frequently meted out to the offenders.

The work of the patrol and of the junior courts is said to be a factor in the safety record of Hamtramck, where no school child has figured as traffic fatality in more than five years.

¹Pollitt v. Lewis, et al., (Ky.), 108 S.W. (2d) 671 (1937).

²City of Louisville v. Commonwealth, 134 Ky. 488, 121 S.W. 411 (1909).

³Kentucky Acts of 1934, Chapter 65. Section 4363-2, Kentucky Statutes.

Ballyhoo or Planned Publicity?

JOHN A. SEXSON

MANY public school systems in common with other institutions, firms and individuals have, under one pressure or another, entrusted their fortunes to professional or commercial "public relations" agents.

They have said to these people, in effect, "Our public schools are in a bad way. The public has apparently lost confidence in their efficacy or is uncertain as to their serviceableness to a point at which financial support is decreasing alarmingly and the organism is threatened as a result with a disabling anemia. We want you to popularize the schools, rouse public enthusiasm, smite the rock of social income and bring forth springs of financial support."

These agencies, so commissioned, have applied to the schools those well-tried techniques, the worth of which have been demonstrated in selling "patent" medicines, real estate, watered stocks and leaky securities. The results have not been too reassuring. As I examine huge publications, costly of preparation and gorgeous of illustration, resembling nothing quite so much as a prospectus for mining stock or oil promotion, I try to reassure myself that such publications and such methods will, in fact, arouse the public to a state of enthusiasm for education as it has been and is going on. I confess I am skeptical.

There is no doubt that such methods have proved efficacious in commercial fields. There is no doubt that pressure groups and vested interests have enjoyed temporary advantages for which they must give full credit to these professional ballyhoo artists. This is not to say that all ballyhoo is dishonest, misleading, untruthful or selfish. But ballyhoo is ballyhoo, and the mere fact that it is truthful is incidental to the issue we are raising here.

We are concerned with the problem of administering an adequate program of public education. We are committed to democratic procedures, and we are concerned with

outcomes that will be evaluated in large part by generations as yet unborn. There is no disputing the fact that many of the so-called successful "public relations" projects have been concerned with temporary and relatively unstable issues. Fads, fashions and foibles of humanity in more than ordinarily inflammable areas of human thought and action have produced the most spectacular fires, lighting up the whole countryside momentarily and then dying quickly to ashes. Many school administrators have found that feverish publicity has given them a gay evening followed by a long-protracted headache.

Too often these professional "public relations" experts have had too much technique and too little program. The result has been a huge commotion and little progress. This is not to decry the techniques or to question their value or validity. There should be a clear-cut recognition of the necessity for building intelligent public opinion in support of any and all the institutions of a democratic society. It acknowledges the importance of effective techniques for achieving such goals, but it points the way to education rather than to ballyhoo and propaganda.

There is wide disparity of opinion in the world today as to the most effective means of adjusting and holding in harmony the increasing complexity of social relationships.

Competing and antagonistic theories of social control vie with one another for favor. This is not the first time men have faced the problem of producing and perpetuating those relationships essential to life, security and the pursuit of happiness. Some have believed that humanity must defend, upon the chance appearance of a "saviour," leaders who apparently bring to men "the way and the life" not alone in spiritual matters but in politics and economics as well.

There are many others who believe that the "hope of man is man." To them the forces toward salvation arise in the hearts of the masses of men. Here they grow and mature to be seized upon by competent and discerning leadership and brought to fruition.

In America we have accepted the second view; we have placed our faith in the common man—in the superiority of government in all phases of men's life "of the people, by the people and for the people." We are the government; we determine the functions that government shall perform; we determine how and to what extent they shall be performed and how much or how little they shall cost.

Most of us of long experience as teachers have come to regard the public schools as a fixed institution in America. We have been conditioned to a program of continued growth and expansion. Our attention has been fixed upon the possibilities of extension of the program to include new services to increasing numbers of new pupils. Such a program is always accompanied by its increased expenditures for the materials of education, including schoolhouses, school grounds and instructional equipment, and an increased and more adequately paid teaching personnel.

We are now sadly aware that public education is subject to exactly the same influences that determine the destinies of other human enterprises, and that even in America it is easily conceivable that "educa-

tional opportunity for all children" shall remain a dream.

Those concerned with problems of leadership in any society must become intelligently conscious of the two problems involved in social progress or the direction of human behavior. One has to do with the techniques of building public opinion and influencing human behavior. There are the techniques of the advertiser, the propagandist, the professional "public relations" agent, the crusader, the publicist, as well as of the teacher, the minister, the civic leader, the statesman and the scholar. Those responsible for the administration of a public education program cannot ignore these techniques.

Swaying Popular Opinion

The other problem of social progress lies in the field of social planning. Men may play with the opinions and direct the action of men with no more plan or purpose than a child has as he steers his play wagon about a yard. Deplore it if we will, regret it as we all do, educate to prevent it to the best of our skill, but men are still swayed in their opinions and controlled in their actions by those who master and employ the techniques of publicity, propaganda, education and leadership. Human affairs are controllable; society is a human structure; the relationships prevailing between individuals, groups of individuals, interests, states and nations are, to some degree, those designed by far-sighted and discerning individuals who, for good reasons or bad, consciously plan the patterns of human life and behavior and bring their fellows to accept them by the well-known techniques of the public relations agent.

Public education in America rests upon a sustaining public opinion. This opinion has in all times been fostered in the minds of men by those who have seen the potentialities of education for individual human happiness and for the security and perpetuity of a democratic society. The founding fathers of this republic, Horace Mann and innumerable leaders, educators and statesmen have given time and thought to building up in the minds and hearts of our citizens a faith in education

as a sound basis upon which to build a national life. In their minds we did not set up government to maintain schools, rather we set up schools to sustain government.

Throughout our history the unlimited educational opportunity for all children has been our most priceless heritage. In community life, at the fireside of every home in America, the desirability of education as a stepping-stone to individual satisfaction and success has been advocated by parents and accepted by children. In foreign lands the lure of America has been its educational opportunities more than its economic advantages.

These stereotypes of belief and action prevailed until the economic collapse unleashed the forces that compelled the curtailment of our program of public education. Overnight the educational aspect of the American scene had changed. Education, in the view of many, was no longer the foundation upon which our governmental structure rested. It was now merely another governmental service competing with highways, municipalities, police and fire departments, relief and social security for a living share of the social income.

Ludicrous and Tragic

All over America the immediate response of the friends of public education was to turn to the "public relations" agent, the professional public opinion builder, the fashion setter in a desperate and dramatic appeal to rebuild the faith of the American people in public education and to restore the support of public education. The spectacle of these antics would be ludicrous were it not so tragic. In some instances, of course, these "public relations" or publicity campaigns have done some good.

The issue confronting educational leadership in America today is: Knowing, as we do, how to shape public opinion, influence public action and determine the direction of institutional development, what do we propose to do with our opportunity? This is the crux of the "public relations" problem in education.

A planned society may be more of a dream than a reality, but planning

with respect to many areas of our national life is now a fact. Business has been planning for years and with notable results. Economists have played a large part in the determination of economic policies in America during the last half decade. Technological planning is going on to an astounding degree.

The National Resources Board has established connections with the highest scientific authority and is operating in such fields as soil conservation, conservation of national resources, water utilization and conservation, land use and administration, housing and public works. Once these courses are plotted, they will be placed in the hands of effective "public relations" agencies for implementation.

Publicity Agencies Not Remedial

The task of any society is twofold: (1) to discover satisfactory relationships, and (2) to establish these relationships. My concern about "public relations" agencies in public education is not with their effectiveness but with their purposes. I hesitate to hurry to a destination I do not desire to reach. I dislike to have educational leadership publicize an unplanned program of public education. I believe in a "public relations" program, in "public relations" agencies and the utilization of "public relations" techniques to advance public education provided we plan in advance and chart our course.

In all these areas, as in many others, the first step is planning; the second step, "public relations" activities. Unfortunately, in all too many instances, the "public relations" agency has been employed in an apparent belief that "public relations" activities in themselves are remedial. It is my contention that they are, to a large degree, neutral. They work with equal and impartial effectiveness for good programs and bad, in the interest of desirable and undesirable outcomes. The educator, the administrator, will necessarily give attention to the program of public education and to the planning requisite for adequacy and effectiveness and, at the same time, utilize to the fullest extent those agencies and techniques that will most effectively and completely implement the program.

Occupational Adjustment

EDWIN A. LEE

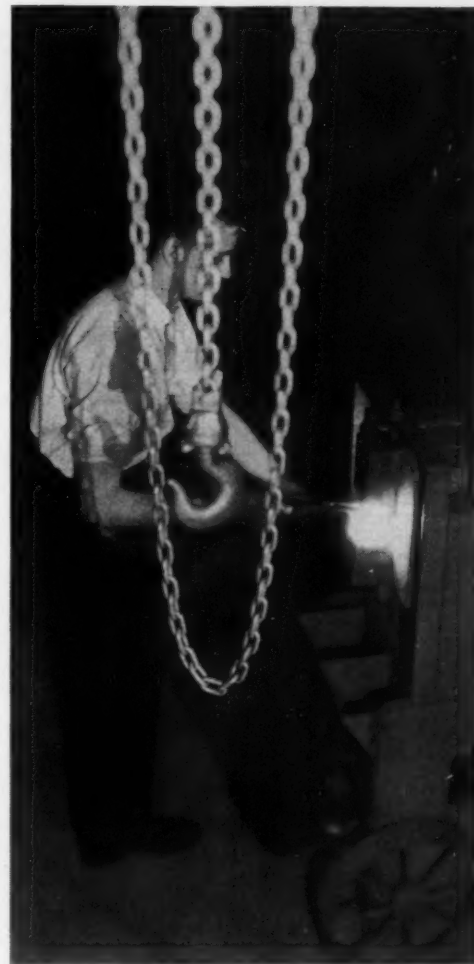
IT IS hardly necessary to emphasize the importance of the problem of occupational adjustment to educators. Every man who has a son coming of age has faced that question that bewilders parents almost to distraction, "Dad, what do you think I should do for a living when I grow up?" If you are a high school principal, parents and pupils alike have come to you asking the same question, and if a superintendent, you have been unable to escape the combined impact from staff and community of this most insistent of all inquiries.

No problem before school administrators today transcends in importance that of training each youth so that he may adequately adjust himself to the occupational demands that he will meet the moment he steps from the comparatively cloistered life of the school into the world of work. No youth escapes this step and no parent or youth wishes to escape it. Just as naturally as he expects and accepts the onset of maturity does your son or my son expect to earn his own living and derive therefrom the indispensable satisfaction accompanying the knowledge that he can perform a work that needs to be done well enough to be worthy of hire.

That we have for so long, except for certain notable programs, failed to come to grips with this problem is sometimes hard to understand. Admittedly it is difficult. Admittedly

it is not simple, but complexity, too, has been accepted as a challenge by every superintendent worth his salt, and not infrequently routed. As insistent as the demand for occupational adjustment has been, there has been a lack of constructive and far-seeing leadership to point the way, and lacking that leadership there has been in general only a half-hearted or partial attack upon the problem.

It was because I believe that the solution lies in an informed leadership that I organized and conducted the National Occupational Conference's occupational education tour for superintendents. You have read or perhaps heard how the thirteen superintendents early in May 1937 visited eight different communities and saw at first hand one or more phases of occupational adjustment exemplified. You probably do not know that each man had prepared himself through the reading of a brief bibliography for a more intelligent understanding of that which he was to see. Neither do you know of the careful and thorough plans made by each of the communities visited, nor of the mass of descriptive material that was mailed each day to the homes of the various superintendents. You do know that with the background of this vivid experience the men for two days pondered the implications thereof and produced what they wished to be called a "tentative" report. At the same



Pupil in building construction class at Brooklyn Technical High School. Photograph from "All the Children," New York.

time they voiced the belief that a later, more formal report should be prepared.

Essentially the tentative report was a statement of belief, followed by a simple analysis of the problem of occupational adjustment. There was no question in the minds of these men as to the place that occupational adjustment occupies in a total program of public education. Clearly they faced its insistent demand for inclusion in their program. Fearlessly they accepted the challenge that its provision should be in terms of all the children and all the adults enrolled in their schools. Calmly and

Already new vitality has been injected into the solution of the problem of occupational adjustment in secondary schools. The year's findings of the superintendents who took an occupational tour are to be incorporated into a handbook by the National Occupational Conference, so that school administrators will have a guide and a working tool for their local programs

wisely they accepted, too, that that which they visioned was not to be accomplished overnight, but would have to proceed slowly but irresistibly toward definitely recognized objectives, based on substantial research and fortified by public opinion.

A program of occupational adjustment, said the superintendents, consists of three subprograms, each of which must be planned and organized with regard to its interrelations with the other two. It has been called the three-point program of occupational adjustment.

Guidance Comes First

The first point is this: There should exist in every school system a program of occupational guidance, the purpose of which is to provide every individual with information concerning himself, the occupations of the community in which he lives, and the interrelations between these two bodies of information. If there were time I would trace some of the implications of this objective. It is immediately apparent that it implies a teaching staff trained in vocational guidance, led by a supervisor especially equipped in the theory and techniques of guidance. It implies, too, continuing study of the occupational complexion of a community as well as a sound program of testing and research as regards individuals.

Occupational guidance, if it is to have real meaning, must be followed by occupational training. Therefore, the second point emphasizes the need for as wide a variety of opportunities for vocational education as the community affords: vocational classes in high schools; special trade schools; part-time cooperative programs in which the learner divides his time between school and business or industry, learning all the time; *bona fide* apprentice programs. For some cities all the foregoing are possible, for others conditions require solutions on simpler terms. The point is adequate solution, no matter what the terms, so far as ingenuity and enthusiasm and vision make it possible.

Point three constitutes the acid test of one and two. It is occupational placement, that part of the program

in which a youth, trained to an employable level, is inducted into a wage-earning occupation, helped to get started, followed through adjustment after adjustment until it is accurate to say that he is safely launched on a satisfactory work-career.

Here is where many a program of occupational adjustment falls down. Here, indeed, is where education in general too often is found wanting. For how many a high school that you know is it possible to ascertain what has happened to its graduates, not to mention its drop-outs, one or two years after they have left school? Not many. There is little defense for such lack of information. There is none at all when occupational adjustment is under consideration, for the ultimate objective of the three-point program is adjustment, and the total program stands or falls in terms of whether or not a boy trained to an occupation which he has chosen to follow actually goes to work in that occupation.

New Vitality Among Thirteen

With this three-point program in their pockets the superintendents returned to their homes to see what could be done that they were not already doing. I have just returned from a swing around the cities from which these men come, spending a day in each community. Everywhere there was new vitality. Staffs were alive. I met sometimes as many as four groups a day. What had before seemed an insuperable problem was commencing to show signs of vulnerability. There was evidence of attempts to meet the issue on a combined front, counselors, vocational teachers and placement officers all working together toward one end. There is a leaven at work in each community that promises great things for the youth and adults who reside there and want to make their living there.

Already the thirteen superintendents are planning the next step. The date has been set for a spring conference at which it is the purpose, on the basis of the year's experience, to write the first formal report of the experiment. We hope it will be so clear in its statements, so explicit in its findings, so realistic

in its recommendations that any superintendent anywhere may find it a handbook, a working tool that he may use in beginning or improving his program of occupational adjustment. The National Occupational Conference plans to publish this report and send it to any superintendent or principal who is interested enough to ask for it.

If you as superintendents do not take the lead it will not be done in your community. You may delegate the details to other hands, but yours is the final responsibility for the occupational adjustment of youth.

There are some who will say I am preaching a materialistic doctrine. Educators in high places are at this moment attacking that for which these superintendents are standing. With such I have small patience. I love beautiful things: music, painting, drama, great books, the high mountains, the blue of the ocean. I would fill the minds of children with their heritage of culture and loveliness. But of what avail is it to a man if he can never hear the music, or possess the picture, or see the play, or climb the mountains because no man will pay him for that which he cannot do.

Man does not live by bread alone, they say, and I know they speak the truth. Just as true is it that without bread man does not live at all.

For Wise Use of Ballots

Within the last generation, changes have taken place in government that make it increasingly difficult for the citizen to play his part wisely in either local or national political life. The rapid growth in the complexity of social, economic and industrial activities has been accompanied by a corresponding growth in the complexity of the governmental machinery designed to regulate these activities. Merely to vote wisely at the present day, to say nothing of taking a more active part in political affairs, demands of each individual a knowledge of events and issues, of persons and forces, far beyond the knowledge that was once deemed adequate for reasonably competent citizenship. —From *Issues of Secondary Education*, National Education Association.

A black and white photograph of a three-story brick school building. The building features three tall, narrow, multi-paned windows on the upper floor. Below the windows, the name "MORGAN SCHOOL" is inscribed in large, outlined letters across the facade. The ground floor has three sets of double doors with decorative glass panels. Several children are standing on the steps leading to the doors. Two rectangular light fixtures are mounted on the brick wall, one on each side of the entrance. The foreground shows a sidewalk and a street.

MORGAN SCHOOL

THE SCHOOL PLANT



Western High School as seen from Clark Park across the lagoon.

A Close-Up of Western High

HARRY P.

BREITENBACH

A MODERN school must be designed to accommodate numerous educational activities, some of which were scarcely dreamed of a generation ago. In artistic appearance of both interior and exterior, it must conform to far higher standards of public taste. It must be adequate, too, in convenience, comfort, sanitation and safety. Finally, it must be economical both to build and to maintain.

Western High School, Detroit, occupies an entire city block in the southwestern section of the city. Located directly across from a large park with public recreational grounds, it has replaced a former high school recently destroyed by fire. The complete building cost a round million dollars, but only about 32 cents per cubic foot. Since it would



Typical stair construction, showing the use of nonslip tile, which can be replaced at any time without disturbing the whole stair. The marble balustrade is made in one piece instead of two and with flush construction, leaving no place for dust and dirt to collect. Sunshine floods the entire stair. Note the use of metal trim.

Below: A flush metal trim is employed in classrooms in which cork board and black-board are used. The top section makes provision for hanging maps in any position, while a metal plaster stop at the bottom holds the wooden base flush with wall.



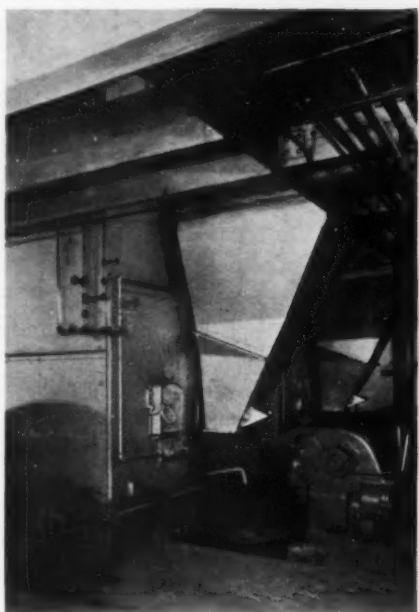
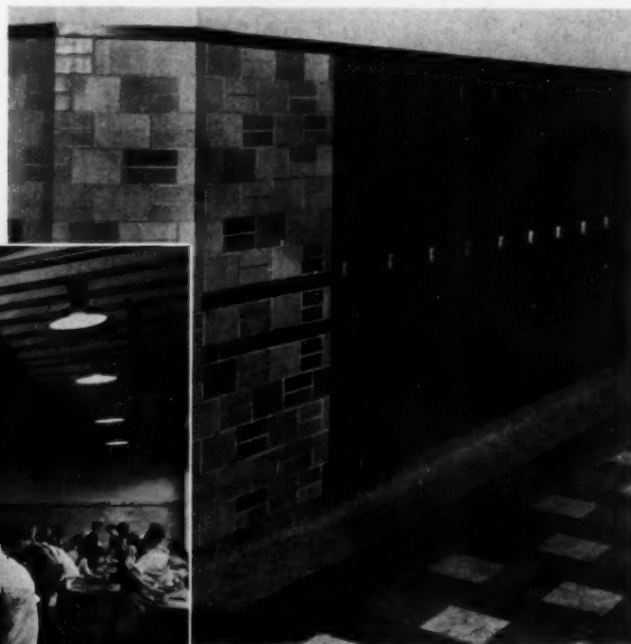
At left: Entrance doors have a rim locking device that cannot be picked, equipped with a roller latch which prevents sticking, and a metal door frame with a bronze sill. The tempered air plenum chamber extends under a portion of the entrance step to prevent snow and ice collecting on the step and around the door sill.



Stage view of the auditorium. Loud-speaker openings at the proscenium jambs are introduced in a decorative manner. Chairs are bound at the edges with metal strips which add a note of distinction, will withstand severe abuse and yet protect clothing from the slivery or worn edges characteristic of many wood seats.



Below, left: A section of the power plant showing the top of the feed hoppers at the level of the coal bin. The hoppers feed into automatic stokers below. At right, below: Pupils at work on pattern machines.



Typical corridor construction. A flush metal trim cap between the salt glazed brick and plaster and the locker head and plaster also holds the locker in alignment without the usual dirty ledge over the lockers. The base is terrazzo.

require nearly four hours to inspect each of its heated and ventilated rooms and corridors, only a few of its numerous features can be mentioned.

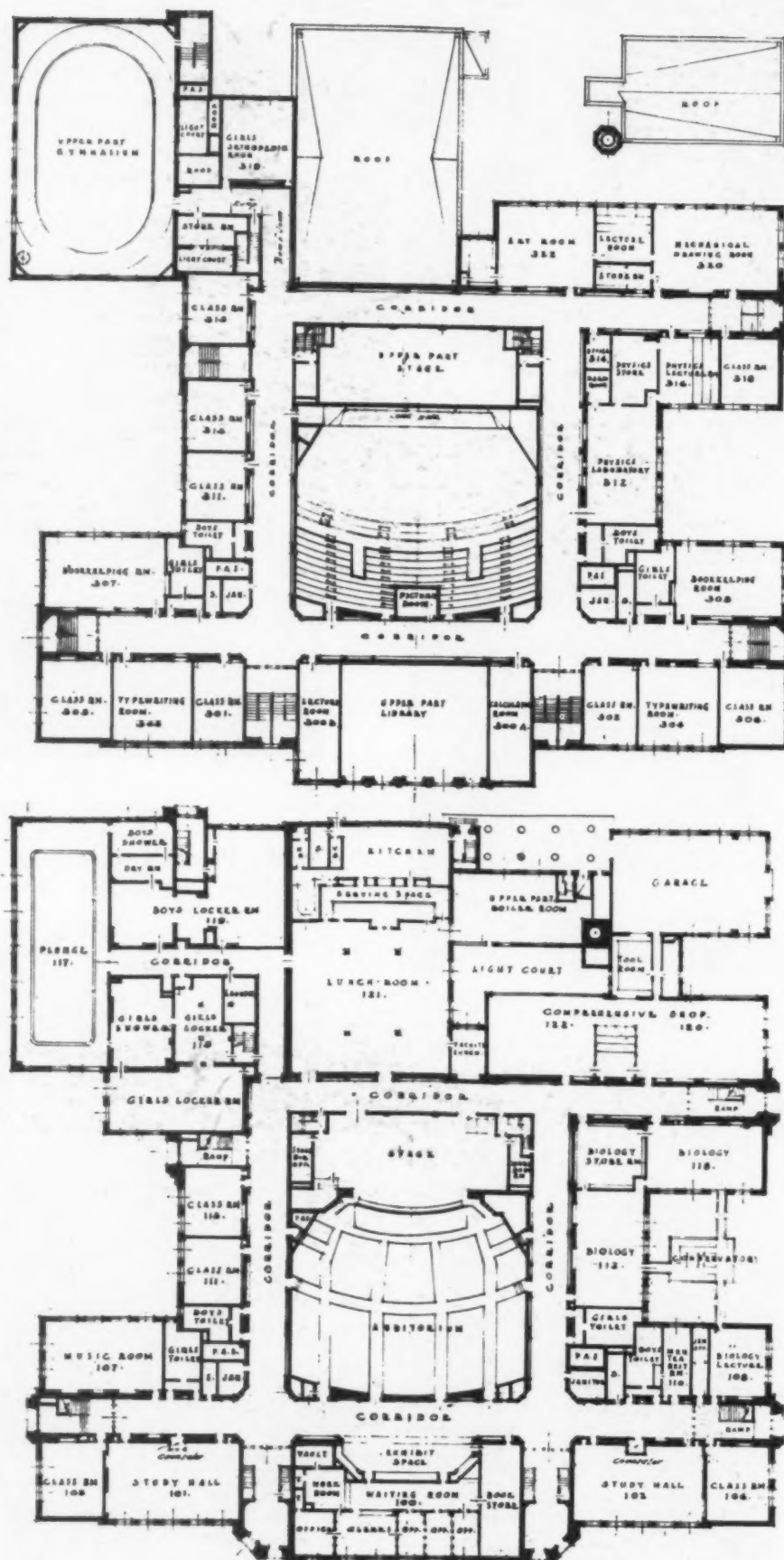
Like other recent Detroit schools, Western High School is of reinforced concrete and steel skeleton construction; that is, reinforced concrete floors and roof slabs are carried by beams which, in turn, are supported by columns of reinforced concrete or steel. Floors and roof slabs with their beams and supporting columns always under stress thus constitute a single unified structure. In contrast, buildings with isolated structural members, *i.e.* with load-bearing walls, are liable to collapse in fires, in major earthquakes and in the case of explosions. For further safety, the power plant at Western High is located outside the main building.

The largest room in the building is the auditorium. Including balcony and stage, it will seat about 2,000 persons. It has been carefully designed for acoustical efficiency. The stage has been fully equipped and includes the most modern radio and sound equipment. The loud-speakers are located at the proscenium jambs in a decorative manner. Both the proscenium jamb and head are made of redwood shipped from the West Coast in one-piece units.

The building is wired for dual radio broadcasting, so that two different programs can be given in various rooms. One control is in the principal's office, permitting a program to emanate from there. In case of fire, for instance, he can broadcast a message throughout the building. Programs also may be given from the stage, the music room, the workroom and from either gymnasium. As in other Detroit schools the use of radio has made rapid strides, and is considered important educationally.

The health equipment comprises two gymnasiums, each 60 by 90 feet, a swimming pool of regulation size, a suite of orthopedic rooms and offices for doctors and physical directors. For the R. O. T. C. a fully equipped rifle range, acoustically shielded, has been provided in the basement.

The library department contains a main room, 55 by 40 feet, a book re-



Above: First floor plan showing the arrangement of classrooms which open into corridors surrounding the auditorium. The comprehensive shop, lunch room and swimming pool also are on this floor. Top: Third floor plan. Bookkeeping and typewriting, physics and art and mechanical drawing departments occupy wings.

pair room and five other special rooms, including glassed-in conference rooms. By using venetian blinds at the windows it is possible to throw the light to the rear of the room on a sunny day, where otherwise a shade would have to be drawn excluding the light.

The main building also includes laboratories for the various sciences. The two biology laboratories and lecture room on the first floor are arranged about a court in which is placed the conservatory. A covered corridor of glass leads from one of the biology laboratories through the conservatory to the biology lecture room. Opening off the second biology laboratory is a large storeroom. In the comprehensive shop section, adequate provision has been made for machine shop, blacksmithing, woodwork and sheet metal.

Separating the carpenter and machine shops is a recitation room, which has been soundproofed, thus making it possible to conduct a lecture without interference from the shop noise.

In the same wing are the food and clothing laboratories. A group of collapsible doors along one side of the domestic science room separates the living room from the workroom. Blackboards are set into the back of the doors. Adequate provision is made for storing materials in the sewing room in which tiers of drawers are built into the walls flush with the plaster. Ample provision likewise has been made in commercial

rooms for bookkeeping and typewriting. The automobile department is a two-story building located on the alley outside the main building. A feature of the department is a mezzanine bench repair unit across one side. Below, tiers of lockers for pupils are set in flush with the wall.

Right, above: Ventilators are equipped with hinged bird guards. Each has an asbestos special shaped louver, which gives maximum free ventilation area. The material will last during the life of the building without being painted.



Right, center: Alley service is provided for the cafeteria and coal bunkers are placed in the side drive. Note the elevator platform under which trucks may drive so that ashes may be dumped into them from wheelbarrows.



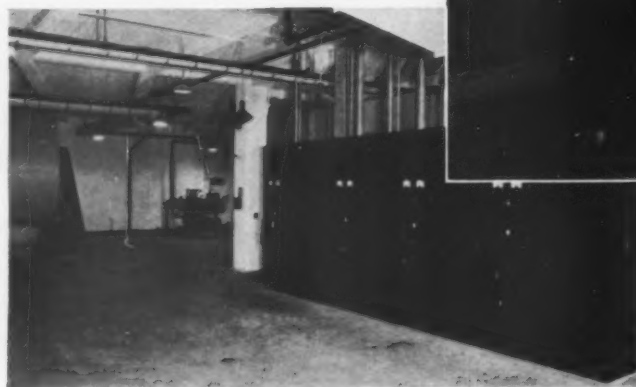
Below: Pupils at work in the automobile department of the comprehensive shop. A bench repair unit is located on the mezzanine floor across one side.



Below, left: Wall benches are placed at one end and the blacksmith shop occupies a corner of the machine shop, which has an adjoining tool room. Lockers are flush with the wall and wainscot is of glazed brick. A recitation room separates the machine and the carpenter shops. This room has been soundproofed with acoustical material on ceiling and partition walls so that lectures may be conducted without interference from shop noises. Sliding blackboards are built into one section of the wall, giving a maximum of writing space.



A central switch-board panel is set into one side of the machine room.

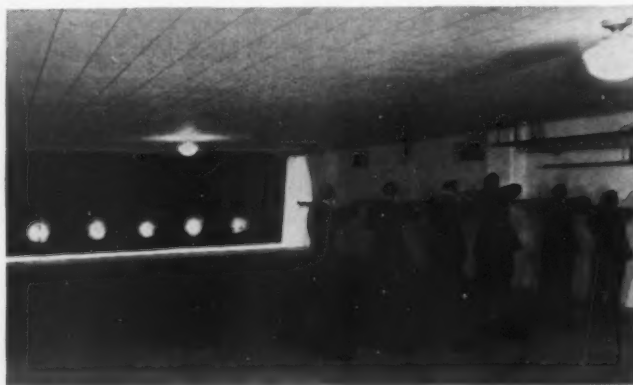


View of the library showing one of the glassed-in conference rooms adjoining. Venetian blinds throw the sunlight to the rear of the room on a sunshiny day.



The building embodies numerous special features, some of which are illustrated, designed for convenience, comfort, sanitation and low upkeep. One of these is a slate roof nailed to wood screeds cast in a sloping concrete slab. Another is the use of cop-

Below: The rifle range in the basement is soundproofed with acoustic material in ceiling and walls, thus successfully excluding the artillery noise from the classrooms above.



Above: Two programs may be broadcast from radio and public address headquarters at the same time. A central control panel makes it possible to select programs for the various rooms.

per gutters drained by a cast iron conductor carried inside the building. Another example is the standard blackboard and wainscot cap construction. At the top of the section of cork or blackboard is a flush metal trim, which makes provision for hanging maps at any point. At the base of all walls a metal plaster stop makes possible a flush construction of wood base and plaster wall; hence there is no place for dust to collect or vermin to enter, so that maintenance is reduced.

Preparing for Play

JOHN DeVRIES

PLAYGROUNDS must be built to invite use. They must not resemble a vacant lot with a little equipment, but must offer facilities for the different demands of children of varying ages.

A playground should be a beauty spot in the neighborhood. It is the duty of every superintendent of school grounds, when laying out a playground, to bear in mind the fact that the youthful mind appreciates beauty. Landscaping is in itself an art study. What better way is there to impress our youth with harmony of design and unity of plan than by a well-organized playground! A playground provides opportunities for children in their own groupings under proper supervision and instills a love for such things after they leave school.

"Keep Off the Grass" signs have no place in a playground. Visitors should feel that the grounds are theirs to use for the purpose for which they were designed. When finished, the grounds must reflect the functions for which they were built. A liberal planting of trees should be made when the rough grading of the ground is in process, but of course the best time to plant big trees is in the winter with a ball of frost.

In built-up communities the size of the playground is usually determined by the amount of land available and its cost. If the land is available, a rectangular plot is best, and in the approximate ratio of 300 by 1,000 feet. The total area, of course, would be governed by the number of individuals to be served. For instance, in a departmentalized school the playground is in use during every period of the day by small groups; therefore only a small area is required. However, with urban congestion and traffic hazards, school buildings have turned into community centers and it has become necessary for school playgrounds to be made into neighborhood playgrounds for the older as

well as the younger children. This necessitates the provision of larger areas.

A playground 300 by 1,000 feet will, without crowding, care for approximately 40,000 children per season. In an elementary school that is not organized under the platoon system, the playground should be figured on the basis of 150 square feet per child. This averages approximately three acres per school where enrollment ranges from 800 to 1,000.

The entire area should be fenced, but set back 5 feet or more from the walk to allow room for beautification such as the planting of trees, shrub-

Selection, layout and surfacing of playground areas, athletic fields and running tracks concern this author, who has had practical experience in all of these as superintendent of public school buildings, Kalamazoo, Mich.

bery and vines. The fewer entrances the better, but they should be carefully placed so that the temptation for pupils to climb fences will be minimized.

If the playground is too far distant from the school to make use of that building's toilet facilities, then a comfort station and shelter should be built at one end of the long axis of the playground. Areas for the smaller children should be arranged nearest the shelter house, while those for older and larger children, who are interested in soft ball and such games, should be placed at the opposite end. This arrangement leaves a center area available for informal play as well as

affording those supervising an uninterrupted view of the entire length of the playground.

Frequently the cost of grading and drainage is the largest item of expense in the construction of a playground or athletic field. Grading and drainage are exceedingly important factors since the water must not be permitted to remain on the playground. Coarse gravel or coarse cinders are an ideal base upon which to build a playground or athletic field. Another desirable requisite is that the field should slope gradually, so the surface will not be washed out during or after a rain. The slope, if possible, should be from center to the sides where catch basins may be provided. A grade of 6 inches to each hundred feet is usually satisfactory for surface drainage. However, should the grade be more than 300 feet, tile drainage pipes should be set under the surface.

The importance of providing a good surface for play activities cannot be overemphasized, as a well-surfaced play area is not only attractive but permits healthful and enjoyable play. Turf is the best surface for the smaller children's areas, but of course when the areas are small and are used intensively, it may be impossible to maintain a grass surface. In that case, great care should be taken to choose materials for a finished surface that will not become dusty in dry weather or sticky in wet weather.

The following specifications, taken from the "Public Elementary School Plant" by Spain, Moehlman and Frostic, should be particularly helpful in maintaining a relatively dustless surface.

"Preparation of Grounds: All grass, weeds or humus material shall be removed from the playground area, and if fill is necessary, only good soil or cinders free from dirt or ashes should be used.

"First Course: Cinders, not to exceed 2 inches in diameter, and free from dirt or ashes, shall be spread to a depth of 3 inches, wet and rolled with a suitable roller until no wave

forms in front of the roller. The finished grade of this course shall parallel the finished grade of the finished surface. This course shall be wet before the second course is applied.

"Second Course: This course shall consist of 2½ inches of limestone screenings and dust spread evenly over the first course. This course shall be rolled with a suitable roller and sprinkled between rollings until a smooth and compact surface is obtained. Calcium chloride shall then be spread evenly upon the surface, 1½ pounds to the square yard, according to the manufacturer's specifications."

The minimum area for an athletic field for organized games and sports, including track and field events, should not be less than 5 acres. If major sports such as football, baseball, soccer, tennis and track are included, 20 acres should be the minimum because, besides a ¼-mile running track, a practice football field together with a stadium and field house should be included.

One of the essential features of an athletic field is a carefully constructed running track. From suggestions, many of which have been taken from replies to questionnaires sent to more than fifty university track coaches, and compiled by H. P. Schulte of the University of Nebraska, it appears to be a generally accepted fact that a well-constructed running track should be put down in three layers: (1) a coarse layer consisting of rubble, stone or clinkers, which has been leveled and heavy-rolled; (2) a middle layer of straight-run cinders of rather coarse grade but without heavy clinkers, and (3) the top dressing, finely screened cinders mixed with clay, black loam or coal ashes.

The foregoing specifications were used for the running track at the Upjohn athletic field in Kalamazoo. The top dressing on this track consisted of a 2-inch layer of screened cinders over a ¼-inch screen mixed with half clay. Later, this was changed to three parts cinders and one part clay and it has proved most satisfactory.

For the rough fill, the same material can be used as specified for playgrounds. Of course the materials depend upon local conditions, but again good drainage cannot be over-

emphasized. Top dressing, too, depends somewhat on local conditions. Firm, sandy loam has been found quite satisfactory. For good surface drainage, the field should have not less than a 5-inch grade from center to sides.

Only the best grade of athletic field seed should be used and this should be purchased from some reliable house that has worked out and uses its own specifications for athletic field seed.

When football fields are used intensively in the late fall, the turf is likely to be ruined in the center of the field and if the season is too far along for the necessary repair work, then as early in the spring as weather will permit, a ½ to 1-inch layer of rich screened garden soil should be raked in with care so as not to disturb the grass roots.

In Kalamazoo top dressing soil is prepared in some remote corner of the field by putting down a layer of good top soil about 10 inches to 1 foot thick, built up on about a 10 to 12-foot square. On top of this soil is placed a 6-inch layer of good rotted manure, built up layer on layer according to the amount of top dressing needed in the spring, taking into consideration, of course, the shrinkage caused by the rotting of the manure.

In cases in which a slight settling in the field has occurred this should be brought back to grade in those places, and whenever the top dress-

ing is spread on rather heavily it is always well to re-seed these areas.

A liberal planting of evergreens and shrubs that hold their foliage late in the fall can be used inside of the fence to a good advantage, not only to beautify but to serve as a screen when paid admissions to contests are required.

Since concrete cracks and checks, and asphalt does not get enough heavy traffic to keep it in satisfactory condition, good clay seems to make the best tennis courts. However, the upkeep is relatively high and the courts are not usable immediately following a rain.

In some new types of courts 6 inches of gravel is being used, followed by 2 inches of pea gravel. After this is put down, a top of crushed limestone is added, wetted and well-rolled. Calcium chloride is used on the courts twice during the season and paraffin oil is also being tried as an experiment.

In some places concrete or asphalt has been removed and the courts are constructed of crushed limestone, two grades of which are available—one quite fine and the other coarser. Much rolling and water are required.

On account of drainage, tennis courts may be pitched from one end to the other. More satisfactory ways, however, are to pitch from center to end, or from each end to the center with a small gutter under the net, so that one player does not have an advantage over the other.

Repairs on a Lean Budget

WITH a budget drastically reduced by the economic situation of a few years back, the building department of the Atlantic City public schools evolved a plan that called for a reorganization of the maintenance staff.

The contractual term of employment of the janitorial staff was reduced from a full year to ten months. At the end of the school term the buildings were locked up for the two summer months. Men from the janitorial force were organized into crews of from one to eight members.

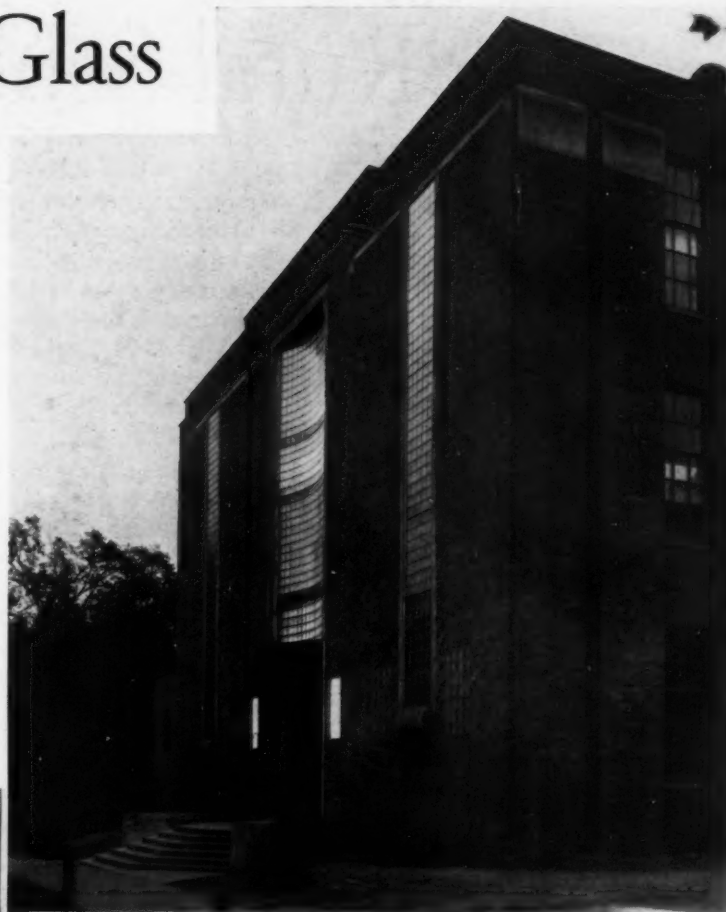
Each crew was assigned certain repair jobs to be completed before the beginning of the new school term.

The work undertaken by these janitor-repairmen included repairs of window shades, door checks, panic bolts, slag roofs, fire extinguishers, steam boilers, pipe lines, valves, flues, radiators, grates, ventilating units, fans, ducts and warm air heaters. For five years these janitor-repairmen, together with five regular building mechanics, have managed to keep the school plant in operating condition.

Along Comes Glass

The first problem in designing the Waukesha High School, Waukesha, Wis., was to admit daylight into corridors more than 180 feet long in which the only light source was at each end and at an open stair tower near the center. With usual methods the answer was \$2 per square foot, and a light infiltration of about 70 per cent. Then along came glass blocks at a saving of 25 per cent, no maintenance, increased insulating efficiency and a light transmission exceeding 80 per cent.

The building is one of four situated on a common campus, a senior high school, junior high school, and an elementary school in addition to this combination school. It was constructed with federal aid under PWA, started in 1936 and completed in 1937. The cost was \$215,000, and the cost per cubic foot, 33 cents. Architects were Clas & Clas, Inc., Milwaukee, with Charles C. Reynolds and S. A. Snyder of Milwaukee as associates.



The main facade. The center concave opening forms the corridor lighting unit, a portion of which is shown below. In making this opening concave greater lighting efficiency was attained.



Above: A view of the center of the corridor looking toward the end. The opaque object across the opening is a concrete stiffener with an open steel guard rail beneath and to the floor line. Right: Glass blocks provide a maximum of light for the stair tower.



In the swimming pool an additional problem was met and solved—that of condensation. Use of glass blocks also provides the required obscurity, the elimination of glare experienced through sheet glass and a complete absence of infiltration.

Rural School Plumbing



"THERE is no improvement in a rural school that contributes so much to the better health of the pupils and the teacher and the efficiency of the school as the installation of modern plumbing fixtures."

So says Mrs. Marie Conrad, principal of the Silver Springs School in Dane County, Wisconsin, two miles outside of the Madison city limits.*

The Silver Springs School has an enrollment of ninety-six pupils. When it was built in 1892 it had only one room. Another room has been added since. The school has a full basement which is in frequent use for social affairs of the community.

Last summer the two outdoor privies were torn down and replaced by modern flush toilets installed in the basement. This improvement was made possible by the installation of a modern electric pressure water system.

Now the school has a constant supply of water for the drinking fountains, for the kitchen sink in the community club kitchen, the two toi-

let rooms, the two lawn faucets and the humidifying equipment.

Surprising, isn't it, how many uses there are for water in a rural school! Some rural schools are going even further in their plumbing modernizing program by installing shower baths.

The modernizing of the Silver Springs School by the replacement of the insanitary outdoor privies by modern plumbing is typical of what is taking place in thousands of rural schools.

The Little Red Schoolhouse is going in for modern plumbing. Plumbing follows the power lines. There has been a rapid extension of power lines in rural districts. At the close of 1937, the private electric power companies had connected more than a million farms, and there has been a substantial number of extensions under federal sponsorship.

How much does it cost to install plumbing in a typical rural school? What is the best procedure? What are the conditions affecting the work?

These are questions that are of greater interest today than ever be-

fore in view of the extent of the rural school improvement program now under way.

Before proceeding with the answers to the questions—some of which are sure to be technical—let's drop in for a visit at the Silver Springs School and let Mrs. Conrad tell us just what running water means to pupils and teacher.

"It's the hot lunches!" Mrs. Conrad exclaims enthusiastically. "We just couldn't have them unless we had a plentiful and convenient water supply at the sink for the dishes. One week the eighth grade serves the lunch. The next week it may be the seventh grade, and so on. Each grade gets its turn at serving and doing the dishes. Mothers of the various grade pupils take turns in providing the hot dishes. Much of our kitchen equipment was provided by the Community Club.

"And on rainy days—that's when we most enjoy our plumbing," Mrs. Conrad adds. "It isn't necessary for the boys and girls to go outdoors at all. I know it's going to mean better health for all of us."

Mrs. Conrad waxes enthusiastic,

This is Silver Springs School, Dane County, Wisconsin, looking very proud. The reason: It now has city plumbing and three modern drinking fountains.



*The author wishes to acknowledge his indebtedness to Frank R. King, state plumbing and domestic sanitary engineer, Wisconsin State Board of Health, and to Meyer S. Bogost, Dane County sanitary engineer, for assistance in the preparation of this article.

NORMAN J. RADDER

too, about the time the pupils save in getting drinks. With two drinking fountains upstairs and one in the basement, all of the ninety-six pupils can get drinks quickly.

Leaving the teacher and pupils of the Silver Springs School happy with their new plumbing, let's turn to general problems connected with a rural school plumbing project.

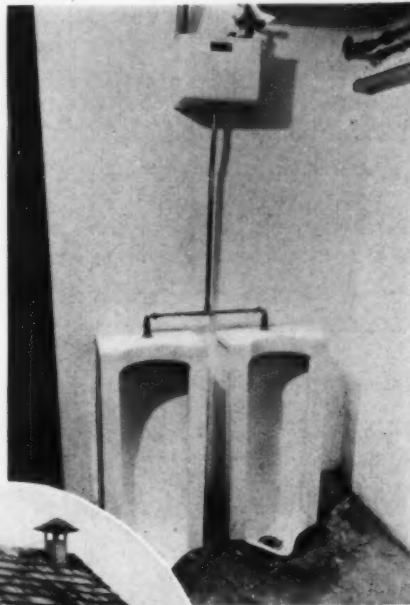
A number of factors must be taken into consideration as a preliminary to actually starting the work. Assuming that electric power is available or soon will be, let us consider:

1. Is the water supply safe and adequate?
2. Is the condition of the soil favorable for a safe disposal of waste?
3. Where shall the toilet rooms be located?

Obviously all of these are vital points affecting the general plan of

the work as well as its cost. In fact, no accurate estimate of the cost can be obtained until these questions have been answered.

It is at this point that the school board should obtain the services of a plumbing contractor who has had considerable experience in the design and installation of plumbing systems in rural districts. The first point that the plumbing contractor will investigate is the water supply. Perhaps the school already has a well.



Urinals in the boys' toilets are flushed by waste water from the three new drinking fountains.



The object in the circle has been demolished. The pupils now enjoy lavatories and modern toilets.



If so, it will have to be tested for purity and yield.

Given the number of pupils in the school, the experienced plumbing contractor knows how to estimate the probable maximum consumption of water. Five gallons of water per child per hour is a rule usually followed. Having determined the demand, the next problem is to see if the yield of water equals the peak load demand.

If the water supply is not adequate, the well must be made deeper or another well drilled.

The usual procedure for testing the purity of the water is to send a sample to the laboratory of the state board of health. If the water is not pure, possibly the source of contamination can be located and eliminated. If not, another well must be drilled.

The next step is to investigate the adaptability of the soil for the safe disposal of the sewage. Test borings will disclose if the soil is loose and sandy and therefore satisfactory for the disposal of the effluent from the septic tank, or if it is a clay soil and close in texture. If the latter conditions prevail, it will be necessary to provide special means for the disposal of the tank effluent.

Having investigated the situation with reference to water supply and waste disposal, the plumbing contractor will then determine the location of the toilet rooms. Space may be found in the basement, cloakroom space may be used, or perhaps some classroom space may be utilized. If this is not practical it will be necessary to build a small addition to the school.

In the case of the Silver Springs School, adequate space for the toilet rooms was found in one end of the basement. The school had a full basement, 27 by 60 feet. The heating plant is in the center of the basement. A recreation room is at one end and the toilet rooms, with a kitchen between them, were located at the other end.

Perhaps it should be explained that the Silver Springs School is the focus of the community activities of the neighborhood. The basement recreation room is frequently used in the evening. It is for this reason that a kitchen with sink was provided in the modernization project.

The plans accompanying this article show the arrangement and the location of the fixtures in each room. The boys' toilet room is equipped with two siphon jet, seat-operating water closets; two vitreous china stall-type urinals, 16 by 41 inches, and two enameled iron lavatories, 17 by 21 inches. There are no floor drains in the boys' toilet room. Instead, the floor is sloped toward the urinals, thus providing drainage for cleaning.

Equipment in the girls' toilet con-

sists of four seat-operating water closets and two lavatories.

Closets in both toilets are provided with durable, hard rubber, open-front seats. This material is ideal for sanitary seats, inasmuch as it is impervious to moisture, easy to clean and will stand abuse.

Closets, as required by the Wisconsin State Board of Health, are separated by metal partitions. All closets are provided with local vents to the outside air.

The school is equipped with three drinking fountains, two being upstairs and one in the basement. The bubblers are of the latest approved type with angle stream, mouth guard, nonsiphoning and nonsquirting, and equipped with a self-closing valve. The waste from the drinking fountains is piped to the urinal flush tank in the boys' toilet, thus effecting a

desirable economy in water. The closets, too, are of the water-saving type and will flush with 4 gallons of water.

The well is 62 feet deep. The test prior to the installation of the fixtures disclosed a yield of 10 gallons of water per minute with 26 feet of water standing in the well. The electric pumping system has a capacity of 385 gallons per hour and is equipped with a 115-gallon tank.

The pumping system and tank are housed in a concrete pit immediately over the well. The well itself is protected by a 6-inch steel casing and a seal applied in accordance with the Wisconsin well drilling code, administered by the state board of health.

The steel casing, which completely encloses the well pipe, the seal at the top of the pipe and the concrete housing of the pit, all com-

bine to prevent surface drainage and ground seepage from entering a newly constructed well.

A word about tank capacity. It is important that this be adequate. If the tank is too small, the pressure of the water at the fixtures will be irregular. Fluctuating pressure is particularly undesirable at the drinking fountain.

Whereas the well is located 75 feet from the front of the school, the septic tank is located 100 feet to the rear of the school. The ground slopes gently away from the school at the rear. It is desirable to keep well and septic tank as far apart as possible.

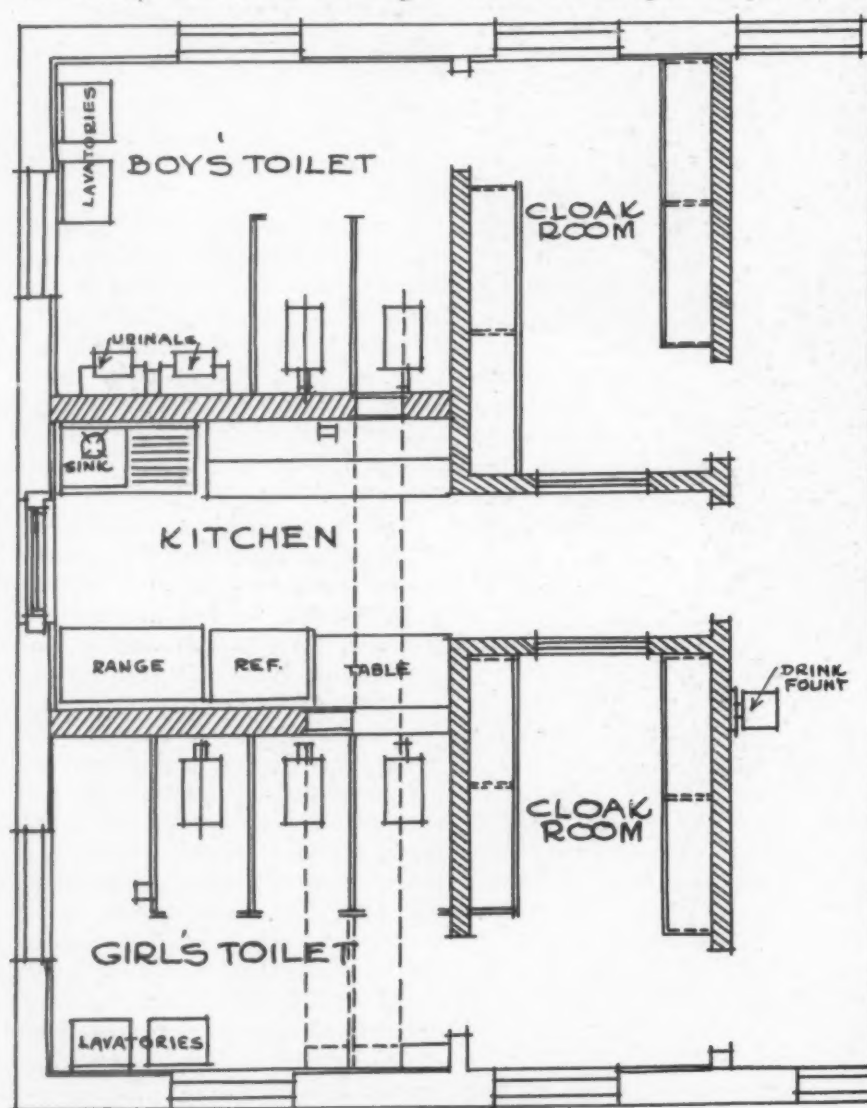
The sewage flows from the fixtures to the septic tank through a line of 4-inch extra-heavy soil pipe. The septic tank is made of reenforced concrete, 8 inches thick, and is covered with a slab of concrete. A man-hole, 24 by 36 inches, is extended to the surface of the ground so that sludge may be readily removed at regular intervals from the septic tank.

In the septic tank the sewage is subjected to bacterial action. Solids are transformed to liquid and the effluent flows through cast iron soil pipe to the dry well, which permits it to seep into the soil.

During the preliminary investigation, ground borings to a depth of 20 feet disclosed a gravel subsoil around the dry well. This is the best type of soil for the dissipation of the effluent.

The dry well is 16 feet in diameter, with a collar of reenforced concrete, 6 feet high, to keep the top from caving in. Below this collar, the retaining wall is made up of stones laid as dry masonry to make possible the disposal of the tank liquid. A 2-inch fresh air inlet is provided, arranged so as to ensure free circulation of air throughout the drainage system, an all important feature.

Total cost of the modernization work at the Silver Springs School was \$2,675. This, however, is not to be taken as an average figure for the installation of plumbing in a country school. Contractors who have done a considerable volume of such work say that costs run from \$1,200 up, depending largely on the size of the school, existing conditions and additions to be made.



Part of the basement plan, showing the layout of the water flushing toilet room.

Control in Campus Feeding

CONSTANCE C. COVEY

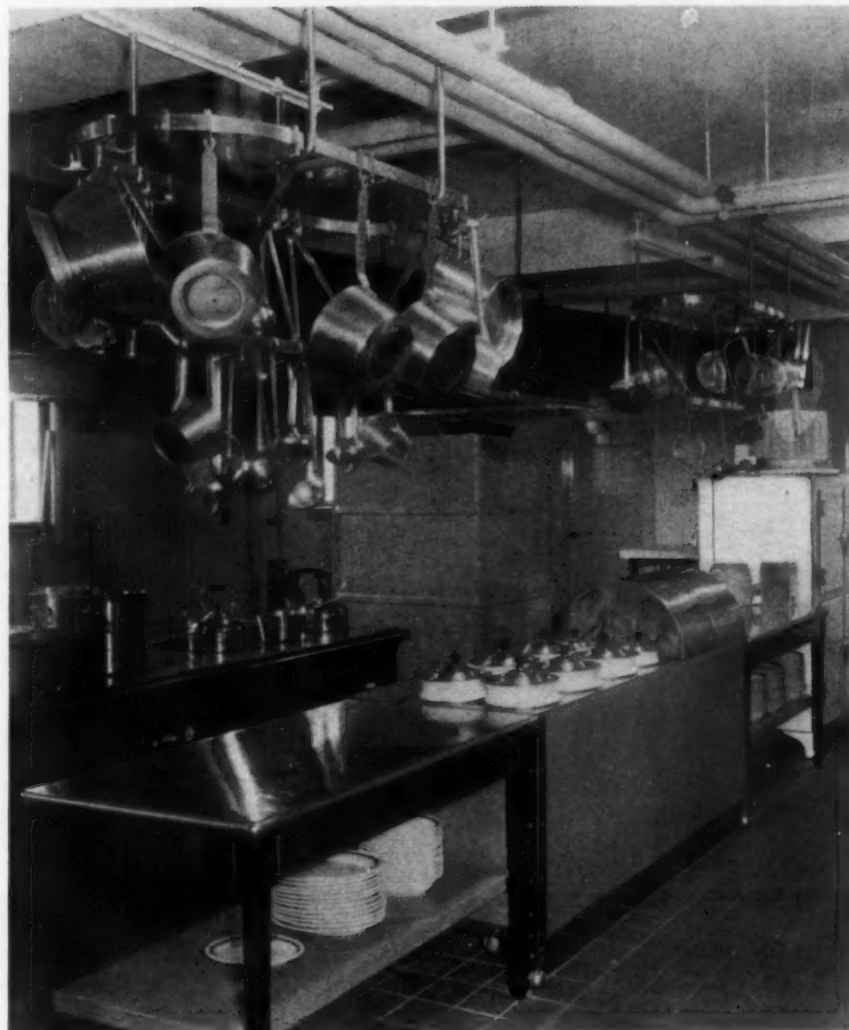
ACENTRALIZED feeding control has been established at Wellesley College. This has supplemented almost entirely the previous system of dining room and kitchen control by individual heads of houses.

This centralized feeding control still incorporates the plan of separate kitchens in most dormitories. However, it puts the direction of these kitchens under a dietitian and her assistants, thus continuing the excellent plan of small group feeding while bringing to these groups one standard and the same policy as to menus, service and general operation.

In the past, the operating cost of a dormitory was considered in its entirety—labor, equipment, food, general supplies and overhead being charged against the dormitory as a building and not divided as to feeding expenses and household operating costs.

With the new setup, a gradual division is taking place which will enable the dietitian to check each month as to labor, provisions, general supplies and equipment costs in all kitchens. Overhead has not as yet been prorated. This plan is being set up without any radical change in the central bookkeeping system but rather by the establishment of a simple set of monthly comparative cost sheets for each house compiled every month by the assistant dietitians, each of whom is responsible for the kitchens that come under her direct control. In this way, all assistant dietitians will be fully cognizant of the financial standing of the kitchens for which they are responsible and can check any irregularities that may appear month by month. As each house is carefully budgeted, the system also gives each assistant a definite knowledge of the budget standing of her own houses.

The general feeding plan for the kitchens under the dietitian's control is as follows: There are ten kitchens,



A corner of the modern electric kitchen at Munger Hall, Wellesley College. Ten kitchens like this provide service to approximately 1,750 students three times a day. Responsibility for the operation of the kitchens is divided among five assistant dietitians. The head dietitian establishes all food policies, engages employees, maintains contact with the purveyor and serves as general manager.

two of which serve two dining rooms, thus totaling twelve dining rooms catering to groups from 80 to 400. The largest kitchen unit has a staff of seventeen employees headed by a chef, but here, as is true all over the campus, the baker is a woman.

In the kitchens feeding about 100, the kitchen staff consists of a woman cook, her assistant, two kitchen helpers and a pantry woman. Including students, faculty, administrative staff

—many of whom have their lunch on the campus—and employees, the average number these kitchens are prepared to feed is approximately 1,750 three times a day.

The responsibility of the actual operation of these kitchens is divided among the five assistant dietitians, all of whom are graduates of four-year household economics courses. Some of them have had graduate work as well. The responsibility of the gen-

eral organization, the establishing of all food policies, the engaging of employees, personal observation of general management, and close and continual contact with the purveyor are the main duties of the head dietitian.

All the dining rooms serve the same menu. Weekly menus are compiled in turn by each dietitian, who is responsible for the tested recipes

eating habits by popular comment or current feeding beliefs, particularly as to weight control.

The completed menus for each day must include the following items.

BREAKFAST: fruit or fruit juice, hot and cold cereal, eggs, hot bread, jam or marmalade, coffee, cocoa, tea and milk.

LUNCH: soup or the alternative of tomato or fruit juice or fruit cup; a

as a relish, and a dessert, richer than the one served at noon. Ice cream is an old stand-by. But, whether the dessert is pudding, cake or ice cream, it is a fresh homemade article either baked in the college kitchen or made in the college ice cream plant and into it has gone only the purest of food products.

With all meals the best certified milk obtainable is served.

Hot breads, cakes and pastries are made in the bakeshops connected with each kitchen and are freshly baked to meet the needs of each meal. Hot breads are taken directly from the ovens to the tables, and fresh cinnamon buns, Southern cornbread and pecan rolls are great favorites.

After the director has satisfied herself that the foregoing requirements have been met, the menus are discussed in a general meeting of all dietitians, and minor adjustments may be made at this time. From these completed weekly menus, the separate order sheets are made for each house, and these orders include not only the necessary meats, fresh vegetables and fruits, but also the canned goods and staples that will be needed from the central warehouse on the campus. Each dietitian is responsible for her own orders, which are checked by the head dietitian and taken to the buyer.

Close cooperation exists between the buyer and the dietitian and many conferences are held for discussions of quality and price of products. Tests are made in the kitchens or bakeshops of various foodstuffs, and a report is given to the buyer as to the results and suitability of the products for the college needs. The buyer goes directly to the Boston markets and during the season fresh vegetables and fruits are purchased from near-by farms as well.

The college truck makes daily deliveries from Boston, thirteen miles away, to the campus and all meats, fruits and fresh vegetables are delivered directly to the individual houses and charged to them. Supplies delivered from the central warehouse are charged to houses on delivery.

All bills, after being checked in the buyer's office, are rechecked by the dietitian in charge of the kitchen re-



The dining room at Munger Hall is one of twelve similar dining rooms that serve precisely the same menu to groups of eighty to 400 college students.

of any new dish included in these menus. A yearly chart is kept in the central office showing main dishes served on successive days, a device that eliminates the repetition of similar combinations on corresponding days. Like all office organization this is set up as simply as possible, but is a helpful guide in avoiding monotony.

Menus are submitted in advance to the head dietitian who studies them closely from five major angles as well as several minor ones. First, and of primary importance, attractiveness to the student; second, nutritive value; third, combination of foods; fourth, appearance and color combination; fifth, suitability as to market prices.

The acceptability of the menu to the student is of great importance and especially so when feeding girls, who are much influenced in their

main course such as soufflé served with bacon, fresh vegetable salad and hot rolls; or a vegetable plate with cornbread; or if a chowder has been served for a first course the second course may be a substantial salad, cottage cheese and toasted rolls; a dessert. If the first course has been a soup, and a vegetable has been served instead of a salad with the main course, a fruit salad with toasted wafers may replace the dessert; as fruit is always popular, fruit with homemade cookies will often appear as a dessert. Apples (from the college farm) baked and served with cream, applesauce decorated with whipped cream and sprinkled lightly with macaroon crunch always find favor.

DINNER: a soup course, which may be replaced by *hors d'oeuvres* or fruit cup, but generally soup; a meat course with vegetables and often a green or raw vegetable salad

ceiving the article. Perpetual inventories are kept in all kitchens, and a physical inventory is taken at the end of each month.

The comparative financial statement made for each kitchen at the end of the month has food products divided into nineteen groups. It shows the monthly cost of these products for the current year compared with the cost of this same product for the same month of the preceding year. Also, the total standing to date is compared with that of the previous year and with the budget standing for the month and to date. Complete meal counts are kept and from these figures provision cost per student per day is computed each month. Comparisons between houses are made and a decided discrepancy one way or another is investigated.

Twice a year all food products purchased to date are grouped under the headings of cereal foods, milk, fruits and vegetables, fats, sugar, miscellaneous foods, eggs, cheese, meat and other fresh foods. Cost percentages of the totals are taken to see if a satisfactory percentage of these

groups is being maintained in the total campus feeding.

All dietitians watch carefully their monthly and total budget standings, for no food director wants to exceed her yearly budget; but as the college provides generously for food expenditures and insists that only the best of food products shall be purchased, the dietitian's major problem is not a financial one but one of serving equally good food from all her kitchens.

Here enters the human factor, for chefs, cooks and bakers may differ radically in their interpretation of tested recipes, and only constant supervision and vigilance will produce from ten cooks ten puddings equally delicious and tempting.

Continual exchange of ideas goes on between kitchens, and no one dietitian wants the dining rooms under her direction to be especially noticed for serving better food than is served elsewhere. Rather, she passes on her successes and warns others of her failures so there may be no weak link in the important chain of campus feeding.

FOOD FOR THOUGHT

Waste Reduced to Minimum

- As mothers see their children off to the Eggertsville Elementary School, a progressive institution located in a suburb near Buffalo, N. Y., their minds are free from worry about lunch for they know that their children will be well fed at school. The following week's menus are sent to the parents each Friday from the school cafeteria so that they may take the children's noon lunch into consideration in the daily food plan. The cafeteria offers two unit lunches daily, costing 10 and 15 cents.

The children know when they arrive at school which lunch they are going to have. At 9 a.m. each teacher marks on a lunch order sheet, provided by the dietitian, the number of 10 and 15-cent lunches and the amount of money received, and sends the order and money to the cafeteria where both are recorded. The correct number of different colored tickets are returned to the classrooms to be distributed to the proper pupils before lunch time.

From the lunch order sheets the dietitian can tell in a few moments the exact number of unit lunches to be served

that day. Through this simple means, not only is almost all waste in the cafeteria eliminated, thus lowering the cost, but also the insanitary practice of having those who handle food handle money is avoided.

At the entrance to the service room are an à la carte menu board and a table at which a pupil sells tickets.

In the cafeteria a drinking fountain has been installed so that fewer water glasses need be washed.

Chocolate Milk Recipe

- Chocolate milk is popular in the cafeteria of the Weymouth High School, East Weymouth, Mass. One reason is that the school makes its own. Every one likes it better than that which is available from the local milk dealer, and the cost is approximately 3 cents per 8-ounce bottle. Eva Skala, dietitian, obliges with her recipe.

SYRUP FOR MILK CHOCOLATE

7 cups sifted Dutch cocoa
14 cups sugar (3½ quarts)
13 cups boiling water (3¼ quarts)
1 teaspoon salt
¼ cup pure vanilla extract

Mix sugar, cocoa, and salt. Dilute with enough boiling water to make a smooth paste. Add the remaining boiling water and boil twenty minutes. When cool, add vanilla.

Yield: 5 quarts of syrup.

Directions: Use 2¼ cups of syrup to 8 quarts of milk.

Success After Six Years

- After six years of unrelenting agitation through letters, mass meetings and personal contacts, pupils at the Edgar D. Shimer Junior High School, South Ozone Park, Jamaica, N. Y., no longer will have to eat cold lunches. Construction of a new wing, chiefly as a cafeteria, has begun as a result of repeated agitation on part of the parents' association. Pupils have had to eat cold lunches since the school was built, as there is no restaurant within convenient distance.

Health Campaign

- In the first eighteen days of a good health campaign in the school at Halstad, Minn., which developed following a physical examination of pupils, the average gain in weight per pupil was 3½ pounds. The largest single gain by any one pupil during this period was 12 pounds.

Pupils suffering from malnutrition and others who requested it, fifty-one in all, are being served milk in school twice a day. Cod liver oil capsules are given to thirty-five children. A fund for free milk for those unable to purchase it has been created by the school board and added to by donations from various service organizations.

The pint jar method of hot lunches was begun as the result of this campaign. The children bring food or beverage in pint jars, which are placed in a shallow tank of cold water. Half an hour before noon live steam is turned into this water and by lunch time the jars are piping hot, furnishing the child with a hot dish of his own choosing.

Winter Weekly Special

- In the Pittsburgh public schools during the winter season, there is a 5c special on the menu once each week which consists of three items—meat, potato and another vegetable. The meat thus cheaply provided is meat loaf, hamburger cakes, stew or fish croquettes. The Pittsburgh schools have a central purchasing system but each lunchroom supervisor plans her own menus. Mrs. Helen F. Gregg is manager and Mrs. F. Beckwith, assistant manager of the lunchroom system.

Next to Godliness?

THOMAS K. WENRICK

SCHOOLHOUSE planning has much to do with convenience in carrying out educational activities. Too often educators have discovered architectural handicaps to progressive practices when compelled to carry on their programs in buildings that were not functionally planned.

To find a forward-looking article of significance in the teaching of hygiene written by an architect and displayed in a leading magazine under the heading "Prelude to Eating" is a real satisfaction. It would be a discouraging outlook for most school people, however, were they required to wait for the installation of "assembly line" handwashing facilities for their cafeterias. In the majority of schools for the next few decades cleanliness will be accomplished in spite of equipment.

It has been my observation that relatively few schools insist on the performance of this simple ritual at lunch time. Why so many words and hours should be devoted to teaching about cleanliness and so few to the practice of this most elementary habit in school would be a dark mystery to any but the teaching profession itself. We have been inclined as teachers to be content with getting proof of knowledge about this or that rather than to develop a habit or disposition to do what is best. We have been satisfied with the verbal knowledge revealed

on the examination paper, and we have not observed whether or not the knowledge bears fruit in better conduct.

How can we so nonchalantly send our boys and girls to the table (as many of us do) without a systematic plan or at least an opportunity for washing? Surely there is a bucket of water available in every schoolhouse in the land, even if the schoolhouse lacks the dignity of having been planned by an architect!

All schools should permit regular visitation to washrooms by all pupils before they eat, although the continuous line used in the high schools of Middletown, Ohio, offers the advantage of shortening the line and saving time that can be devoted to washing. This system, already proved by several years' experience in the senior high school, was extended to the two junior high schools when they were opened in September, 1930.

The fourth period is lengthened thirty-five minutes to provide for lunch, with the option of going home when time permits or of carrying a lunch if the pupil prefers. All lunches are eaten in the cafeteria, where trays, silverware, napkins, drinking water and a comfortable seat are always available.

Classes pass at intervals of two or three minutes after a large initial

Handwashing facilities in the cafeteria from the administrator's point of view are discussed by the head of McKinley Junior High School, Middletown, Ohio

group has been served. Classes in physical education are served last, out of consideration for the health of the pupils. Time allowed for class work is fifty minutes, a part of which is used for supervised study. Adjustment of the divided period is made by the teacher, according to the lunch time assigned to her.

In the McKinley Junior High School the need for hygienic eating was recognized, and a five-minute interval for the purpose of visiting the washrooms was provided. Washrooms are available on each floor for both boys and girls, with two sinks in each room. The average class sends ten pupils to each room or five to each sink where about three minutes actually can be used for washing. Pupils await their turns, and a monitor for each class is responsible for order, speed and economical use of paper towels. At the end of five minutes all have formed in line at the door of the classroom and pass with the teacher to the cafeteria.

If some such fundamental attention to cleanliness is not justified from the standpoint of common decency, then it might be considered in the light of dollars and cents. In these days when participation in state school funds is in some degree dependent on attendance records, even the most extreme case of neglect might be stirred to action by the prospective tinkle of coin. Clean hands should reduce losses resulting from illness.

**Typical Lunch Schedule Under Continuous Line Plan,
McKinley Junior High School, Middletown, Ohio**

Room	To Washroom	To Cafeteria	Return
Study hall shop, home economics	11:45	11:50	12:20
101	11:54	11:59	12:29
103	11:57	12:02	12:32
106	12:00	12:05	12:35
etc.	(12 more classes at two or three-minute intervals)		
Physical Ed.	12:32	12:37	1:07

The teacher heads the class, eats first, returns and opens the classroom door at least five minutes before the time indicated for the pupils to return. Pupils usually remain seated in the cafeteria until the teacher has finished eating. Net time for eating is about twenty minutes.

The Convention News

March, 1938

N. E. A. Legislative Body Upholds Advisory Group in Stand on Federal Aid

The N. E. A., through its legislative commission, has approved federal aid to the states for education as presented in the report of the President's Advisory Committee on Education.

That the report presents the strongest possible evidence in support of federal financial assistance is the opinion of the legislative commission, Dr. Sidney B. Hall, the commission chairman, told members at a joint session with the Educational Policies Commission.

"We are in agreement with the advisory committee that the major portion of federal grants should be to the states on the basis of their financial needs and that as a temporary policy certain funds may be specifically earmarked for the purpose of stimulating new and desirable types of educational enterprises," Doctor Hall said.

"We accept the principle that the major part of the federal grant should go to the states for the support of elementary and secondary education broadly defined. Adhering to the principle of state determination of educational programs, we believe that the fund should be apportioned to the states for public educational purposes in accordance with the state constitutions."

Brownell New Head of A. E. R. A.

Dr. William A. Brownell, professor of educational psychology at Duke University, was elected president of the American Educational Research Association at the annual business meeting, February 26. Bess Goodykoontz, assistant commissioner of education, was chosen vice president and Dr. William G. Carr, chief of the research division of the National Education Association, was reelected secretary-treasurer.

Sexson Takes Office March 15

Dr. John A. Sexson, superintendent of schools, Pasadena, Calif., will take office on March 15 as president of the American Association of School Administrators. He is the first president to be selected by referendum vote.

Administrators, 10,000 and More, Mingle, Listen, Argue and Plan

Arthur B. Moehlman

With a registration above the 10,000 peak of the 1937 meeting, the convention of the American Association of School Administrators opened in Atlantic City with a vespers service on Sunday, February 27.

More than a dozen closely related special groups met either just before or coincidentally with the association. These included the following:

American Educational Research Association, American Council on Education, National Advisory Council on School Building Problems, Department of Elementary Principals, John Dewey Society, Department of Secondary School Principals, Department of Rural Education, Supervisors and Directors of Instruction, High School Supervisors and Directors, Department of Vocational Education, National Council of Chief State School Officers, National Council of Childhood Education, American Association of Teachers Colleges, National Council of Education, National Society for the Study of Education, National Society of College Teachers of Education, Department of Adult Education, Department of Classroom Teachers, Society for Curriculum Study and a number of other smaller groups.

The Atlantic City schoolmen entertained visiting guests in a manner that has come to be considered as almost indigenous to New Jersey. One of the pleasant features was a supper in honor of President Charles B. Glenn.

The main convention was alternately divided into general sessions, discussion groups and social affairs. The Educational Policies Commission of the National Education Association, through Supt. A. J. Stoddard of Denver, presented the results of its work and outlined a future aggressive program.

The report of the President's Advisory Committee on Education was presented by Floyd W. Reeves, chairman, and its general implications were also considered in separate meeting by both the legislative committee and the policies commission.

The tenor of this report is the need for federal participation in a national equalization program, but it also dwells impressively upon the need for retaining popular control of the schools within the community.

Although the convention emphasis on "Youth Problems" was given by the Yearbook, more continuous attention was upon the need for some educational planning to meet possible future emergencies.

Among the convention features were the presentation of honorary life mem-

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Six Scientists Honored by Research Association in First Annual Awards

Six research specialists in the fields of psychology, history and mental hygiene were honored when the American Educational Research Association made its first annual award for outstanding contributions to scientific knowledge in education. The specialists were:

Dr. Nancy Bayley, Institute of Child Welfare, University of California.

Dr. Benjamin Brenner, Hebrew Teachers College, Beth Haherem, Jerusalem, Palestine.

Dr. Merle Curti, Teachers College, Columbia University.

Dr. Arthur T. Jersild, Teachers College, Columbia University.

Dr. Samuel Eliot Morison, Harvard University.

Dr. Frances B. Holmes, New York City.

Among the fifty specialists who participated in the programs of the American Educational Research Association were: Homer P. Rainey, director of the American Youth Commission; Malcolm S. MacLean, director of the general college, University of Minnesota; Carl A. Jessen, specialist in secondary education, U. S. Office of Education; W. A. Brownell, professor of educational psy-

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Gone Is the Simple Country Life, Georgia Teachers' President Says

American country life was once a round of quilting bees, corn huskings, spelling matches, protracted meetings, hog killings and funerals. Its richness was measured by the number and quality of these.

Today the matters of feverish interest to country dwellers are recent acts of Congress and the activities of the federal government.

The center of gravity—social and economic—has shifted from the small neighborhood to the National Capital.

So President Marvin S. Pittman, president of South Georgia Teachers College, told the Department of Rural Education at a luncheon meeting.

"The factors, large and small affecting country life in America are legion," President Pittman pointed out. "Daily the number and quality of those that are native and home-grown become fewer and those that are productions of national conception and propagation are multiplying. Only a partial catalogue of the more important activities of the federal government which are today affecting country life in the United States will show what a large part the government plays."

Country life a century ago was simple and understandable. Today it is so complex that even the Supreme Court has trouble in interpreting it, the Georgia educator asserted.

Delay Arithmetic Teaching and Prevent Inferiorities

Those feelings of inferiority that beset most women and many men when it comes to arithmetic may well have been engendered in the primary grades.

Next generation Chicagoans will not experience them, if such is the case, for formal arithmetic has been abolished in the first two grades.

Dr. J. T. Johnson, head of the department of mathematics in the Chicago Normal College, told the American Educational Research Association about it on Wednesday afternoon.

Reading and spelling, Doctor Johnson declares, are taught to fit the stages of the child's growth. In teaching arithmetic, we have not been so wise.

What we expect of a child in school is so out of keeping with what we expect of him at home in the way of arithmetic ability that the child has grown up to think of his school life as one kind of life and his home life as quite another, according to the normal school professor.



Carl Sedan of the Detroit Convention Bureau and Frank Cody, Detroit superintendent of schools, swing briskly along the Atlantic City boardwalk.



George Baker, superintendent of schools, Moorestown, N. J., and Dr. Stanley H. Rolfe, Newark superintendent of schools, get a whiff of sea air.

Convicts Only Small Fry; Real Criminals Rarely Caught, States Harry Elmer Barnes

John Dillinger was never Public Enemy No. 1. In reality he was not even Public Enemy No. 1,000.

So says Harry Elmer Barnes, educator and writer, who discussed juvenile delinquency in the light of a realistic view of the crime problem before the panel on delinquency and prison education.

Our major criminals of today never get to prison, declares Mr. Barnes. They live peacefully and luxuriantly in lavish metropolitan apartments, enjoying a full sense of security in the knowledge that they will never be disturbed.

Today's really important crime is racketeering. Organized crime models its ideals and operations upon the practices of big business. It has built up a sectional and national organization like big business. It operates only upon previous advice of counsel.

These organized criminals cannot be touched because they pay protection money to the politicians. They even share their loot with them. All too often our prosecutors are put in office by the very politicians who are linked with crime. Few judges get on the bench unless they are approved by the dominant political organizations.

"Even the federal government, Mr. Barnes charges, 'does not choose to meddle with organized crime in any decisive fashion.'"

Such facts as these must revolutionize our attitude toward juvenile delinquency, Mr. Barnes thinks. We must

reduce the appalling number of younger persons now being arrested for lesser transgressions. We must improve our institutions for dealing with juveniles. But this will not seriously curb crime, because the real crime menace is not due to youthful criminals.

By proper character education, we must uproot the dangerous notion that "only saps work," and we must provide a type of realistic civic education that will undermine the unholy relation between organized crime and machine politics, Mr. Barnes believes.

Teachers Preach but Do Not Practice Democracy—Lull

Teachers give democracy voluble lip service in discussions and teaching, but actually practice autocracy, the head of the department of education and teacher training at Kansas State Teachers College, Herbert G. Lull, told directors of instruction on Tuesday afternoon.

When a school administrator attempts to introduce a democratic-cooperative situation, most teachers prefer to retain the yoke of authoritative prescription rather than assume the responsibility of initiative, he charged.

A system in which teachers acquiesce without question to directions from the superintendent discourages initiative, cooperation and sharing. "It begets sterility of ideas, engenders fears, suspicions, and jealousy," he added.



Mason Stratton, principal of the Brighton Avenue School, Atlantic City, pauses on his way to convention hall.

Conflict of Special Interests Confronts Curriculum Director

A battleground of special interests, each developing a program with little regard for the others . . .

That is the school curriculum, Dr. Hollis L. Caswell, professor of education at Teachers College, Columbia University, told one of the division groups of the A. A. S. A.

New subjects arise and fight for entrance. Old ones struggle to hold their own or to increase their retirement allotment.

Indeed, the needs of the students and the problems of contemporary social life get only secondary consideration, sometimes only incidental consideration, in Doctor Caswell's opinion. Overconcern with specialization has narrowed the common interests and purposes, until someone has to be called in to work out a cooperative program.

The curriculum director is the person who must guide the various groups in American education in the adventure of discovering the areas of common concern and purpose. He must help to develop a loyalty among the teachers that reaches beyond the curriculum.

"It is not difficult to discover the areas in which this common interest and purpose may most appropriately be developed," Doctor Caswell declares.

"Two common denominators tie all workers in the common school together. One is the ideals, purposes, conflicts and conditions of our evolving culture; the other is the needs and purposes of youth as they seek to find themselves in the contemporary scene."

"Higher Education for Whom?" Asks President Conant of Harvard

A dark picture of mediocre young men and women being overeducated, while more brilliant youths are barred from college classrooms by economic inequalities was sketched by President James B. Conant of Harvard University in speaking to the American Association of School Administrators.

As President Conant views it, the situation is not entirely hopeless. He believes in scholarships with stipends adjusted by means of a sliding scale to suit individual needs.

Using this scale as a guide, it has been possible for youths from families in the lower salary brackets to attend Harvard College with a minimum of help from their families. At the same time equally brilliant youths from well-to-do families receive scholarships carrying smaller awards.

In President Conant's opinion there are too many students attending universities in America. He does not regard as desirable the movement to increase the number of professional schools and to add to the growing surplus of professional men.

"Before any institution embarks on an expansion of the student body in a professional school," the speaker claimed, "the authorities should consider carefully the questions: Is there a need in this direction? Will this new venture do more good than harm?"

Too little thought, he feels, has been given to the prospects of employment in a particular vocation before a program of study is mapped out. Nor does he agree with those persons who think another year or two of schooling is as desirable as employment.

"I doubt if society can make a graver mistake than to provide advanced higher education of a specialized nature to men and women who are unable subsequently to use this training," President Conant told the administrators.

"Quite apart from any economic considerations, the existence of any large number of highly educated individuals whose ambitions have been frustrated is unhealthy for any nation. The problem of unemployment in the learned professions is likely to become more acute in this country as the relative proportion of adults in the population increases."

As a remedy for this situation, President Conant suggested that the nation would be benefited by dismissing one-quarter or possibly one-half of the students now enrolled in advanced university work and substituting in their place others of more talent.

President Hutchins Finds Use for B.A. Degree

Found: Use for a bachelor's degree.

Dr. Robert Maynard Hutchins, president of the University of Chicago, recommends that the "recognizable and popular B.A. be made to serve the very useful purpose of persuading students to get out of education who should not be permitted to remain in it."

President Hutchins, speaking at the dinner of the Department of Secondary School Principals, recommended the giving of a bachelor's degree at the end of the sophomore year.

"General education should absorb the attentions of students between the ages of fifteen or sixteen and nineteen or twenty. This is the case in every country of the world but this. It is the case in some eight or nine places in the United States."

Unless parents can be persuaded to send their children to the University of Chicago two years earlier than they have been accustomed to sending them, this institution should abandon collegiate work altogether, President Hutchins thinks. The freshman and sophomore years at present are a foreign body in the otherwise admirable constitution of the university.

Six Scientists Honored by Research Association

(Continued from page 59.)

chology, Duke University; Walter D. Cocking, dean of the college of education, University of Georgia; Willis L. Uhl, dean of the school of education, University of Washington; L. A. Pechstein, dean of Teachers College, University of Cincinnati, and George D. Stoddard, dean of the graduate school, University of Iowa.

Topics under discussion included: critical evaluation of textbooks; skill in the use of apparatus and other tools of learning; the educability of emotional behavior and attitudes; personality and personnel problems, and the interpretation of scores and tests in examinations.

Belief in All-Powerful State

The chief danger ahead in education is the belief in an all-powerful government, whether totalitarian, fascist, communist or democratic. This is the opinion of Dr. Paul Monroe, director of International Institute of Teachers College, Columbia University.

School Building Council Approves Schwellenbach Bill; Long Is President

William Lescaze, New York architect, and Lee Simonson, designer of theatrical settings and costumes, were attentively heard at the annual conference of the National Advisory Council on School Building Problems. Mr. Lescaze spoke on "Modern School Buildings for Modern Needs," and Mr. Simonson on "The School Theater."

The following officers were elected to serve during the coming year: Raymond V. Long, Virginia, president; Arthur B. Moehlman, Michigan, first vice president; William F. Credle, North Carolina, second vice president; Hans Schmidt, Wisconsin, third vice president; Alice Barrows, Washington, D. C., secretary, and Leonard Power, New York, treasurer.

At the business meeting following the conference, hearty approval was given to Senator Schwellenbach's bill for federal aid for school buildings.

What Bill Provides

The Schwellenbach Bill provides for a ten-year program of federal aid to the states through grants for new school buildings or for the remodeling or alteration of existing buildings, together with new equipment, all this to be prefaced by a comprehensive survey of public school building needs and required equipment.

For grants to the several states, the bill specifies that \$50,000,000 be appropriated for each of the next two years and that a sum not to exceed \$100,000,000 be set aside for each of the next succeeding eight years. An additional \$1,000,000 is to be allocated annually for purposes of survey and the development of a building program, according to provisions of the bill.

As a preliminary to the building program the bill provides for the organization of a division of school buildings under the U. S. Office of Education to direct the survey of school buildings and equipment and set up a continuous inventory. Assisting the division of school buildings is proposed a technical board of review, consisting of six members, who are specialists in the field of school building problems. The function of these two groups, working with the commissioner of education and the various state departments of education, would be to set up building and equipment standards, define policies and organize plans.

Grants to states, according to the bill, are to be based on the number of children of school age. The bill also provides that the state shall share half of the cost of the project and that the

project must be approved by the school officials of the local agency, by the state department of education and by the U. S. commissioner of education.

10,000 Administrators

Mingle, Argue and Plan

(Continued from page 59.)

bership in the association to Dr. Charles H. Judd, in recognition of his twenty-nine years of service to education at the University of Chicago; presentation of radio artists on Sunday evening by the National Broadcasting Company; a reception to new members on Monday afternoon; a Good Neighbor program on Tuesday, featuring both Canada and Mexico; a celebration of the hundredth anniversary of the McGuffey Readers by the Elementary Principals on Monday during which a "McGuffey School-room" was reproduced and recitations held in the old-time manner, and a huge friendship dinner, with more than 2,000 guests, and an ice carnival on Wednesday evening. A dinner feature was the Detroit Schoolmen's Choir.

The incoming president, Supt. John A. Sexson, of Pasadena, Calif., the first to be selected by referendum vote, will take office March 15.

Cincinnati Dean Tells

How Education Is Right

What is right with education?

Dean L. A. Pechstein of Teachers College, University of Cincinnati, thinks it high time to speak a good word for the much abused institution. He names three of its good points:

1. A right attitude toward youth. To gain the child's right to health, proper physical care, recreation, a safe and moral environment, vocational training, and a place in the economic world has been an uphill fight. And education may rapidly be gaining a right attitude toward the adult. We would do well, with federal support and control, to extend compulsory education into adulthood, for the mastery of peculiarly adult problems, he believes.

2. The rightness of its spiritual freedom. The right to experiment, read widely, judge for oneself, inquire, speak one's mind and subject his opinion to the critical dissection of companions—the teacher and the entire school group—is characteristic of the American school. To teach the facts regarding all patterns and to leave to intelligent judgment the final choice—this is America's way.

3. The rightness of its middle-road philosophy. Education today takes the road of liberty under law, a road of zestful social living of children, but under wise adult guidance.

"Relax," Is One Board Member's Watchword for High School Pupils

"You must relax" may well be the watchword in secondary schools of tomorrow if their administrators take the advice of James Marshall, vice president of the board of education, New York.

Mr. Marshall insists that classroom activities must be organized so that the children will be less tense and the emotional strain under which most dull children work will be relieved. He recommends that schools make more use of the child's specific interests and give more attention to promoting a feeling of security and good social relationships.

"Throw most of the textbooks in use out of the windows," Mr. Marshall advised the A. A. S. A. "Give instead living classroom situations, develop club work, discussions, arts and crafts and emphasize those things usually called extracurricular."

Mr. Marshall sees a close relationship between a child's intelligence quotient, school progress and health, and the family's social and economic status. He gave examples of the effects of emotional conflicts on the ability to learn.

In the majority of cases, delinquency stems from maladjustment that is the direct result of social, economic or emotional conditions in the home, he believes. To prove his point he cited facts obtained in a two-year study of the New York City school system recently completed by the committee on maladjustment and delinquency.

The attitude that the child must fit the curriculum or fail must be discarded, Mr. Marshall asserts. Instead, schools must prepare to counteract undesirable outside influences, putting the teaching of skills and facts in a secondary place and placing the real emphasis on activities that will teach the child to think.

Mr. Marshall is not convinced that vocational courses provide the solution for the duller pupils, nor does he hold with those who favor classical learning as a pattern. Somewhere between these two, he believes, should be found a middle course that will fit the democratic changes now taking place in education, and that will aid the pupil to function effectively in adult life.

Probably One-Fifth of Educational Research Is Dependable: Monroe

Separation of the wheat from the chaff in the harvest of educational research during the last forty years probably would not reveal more than one-fifth of the magnitudinous research studies sufficiently dependable to be used as a basis for educational science.

This was the conclusion reached by Walter S. Monroe, director of the bureau of educational research at the University of Illinois, who addressed the American Educational Research Association on Wednesday afternoon.

Instead of 50,000 existing studies, elimination of a large proportion of the

worthless contributions probably would not leave more than 10,000 dependable findings, he said.

The speaker reiterated from time to time his plea for comprehensive and critical survey of the studies that have been made in the field of education and an interpretation of the findings resulting from this survey. Until these steps are taken, he said, we cannot have an adequate appraisal of our efforts to develop the science of education.

Examination of reports of research reveals little satisfactory interpretation, he stated. Until findings are interpreted in terms of a philosophy of education or a point of view, they are of little value in educational thinking, he believes. Many of the findings of educational research, in the form of averages,

and coefficients of correlations, are only "food for thought," he added.

Monroe expressed disappointment in the large number of experimental studies for determining the relative merits of different methods of teaching, since the evidence suggests that the method or pattern of teaching is not as important as other factors contributing to the education of children.

Adult Education Inexpensive

A small per capita budget of from \$5 to \$10 will maintain an adult education program, in the opinion of O. B. Badger, director of adult education for the public schools of Tulsa, Okla. Buildings and most of the necessary equipment are now available.



Edgar G. Doudna, Madison, secretary of the board of regents of the Wisconsin normal schools, upper left; Mr. and Mrs. E. E. Oberholzer, Houston, Tex., center, and Nicholas Bauer, superintendent of schools, New Orleans, right. Below, left, Carroll R. Reed, Minneapolis city superintendent, and Frank A. Jensen of LaSalle-Peru Township High School, LaSalle, Ill.

1938 Going to Be Good School Year Convention Exhibits Would Indicate

If there is any "recession" about, it did not rear its ugly head in the Auditorium at Atlantic City, N. J., where the American Association of School Administrators as part of its sixty-eighth annual convention put on one of the most successful exhibits in its history. There were more exhibitors present than ever before brought together by the Associated Exhibitors; there were more visitors to inspect a varied assortment of products new and old, and judging from the enthusiasm of the crowds early in the week there was buying power aplenty.

School building is going ahead. There was talk of it everywhere—in the hotel lobbies and about the corridors of the Auditorium. Conspicuous among those attending the exhibits were the architects and board members, all interested in gathering new ideas, studying trends, and determining what 1938 holds for the school market. Everyone reported satisfaction in the outlook and departed for home enthused.

Examining the exhibits somewhat analytically one fact is paramount—the book publishers ran away with the show. This trend has been noticeable for the last two years. This year it constitutes almost a challenge. Book stalls in bewildering array were scattered over the entire 86,000 square feet of exhibition space. Standing at one end of the tremendous arena and looking down one of the main aisles gave the impression that it was a publishers' show exclusively. According to the official catalogue out of some 254 exhibits, 92 were devoted to books. The only conclusion is that the publishers are confident.

New Exhibitors Noticed

There were manufacturers on hand who have never before shown at the N. E. A., although they have in some instances, at least, been serving the field for many years. It is likely, however, that they will be regular attendants in the future. One such concern introduced a noninstitutional feeling in furniture, showing most effectively what could be done for the cafeteria and other departments by more informal designs and finishes. Such equipment is, of course, ideally adapted to homemaking units.

Also among the newcomers was one sponsoring interest in leisure-time activities—athletic equipment such as footballs, medicine balls and similar items. The athletic program, in fact, was very apparent as always. One of the displays

that aroused particular comment was a small model of a gymnasium, complete in every respect, showing the folding bleachers in operation. Right next to it in the same booth was an example of what radio has done in necessitating special furniture for the school plant. A soundproof door was swung slowly to and fro for the admiration of the visitors, while its fabrication of lead was carefully explained.

Contrast in Seating

Always to be depended upon for putting on a good show, the manufacturers of school seating this year outdid themselves. What a happy idea that which awakened the memories of an old-fashioned school bearing the date of 1888! A group of children in the quaint costumes of the time sat at tiny desks elaborately carved with initials encompassed in hearts. In the corner was the old stove typical of the nineteenth century with the wood box alongside. On his raised platform behind an old desk sat the bespectacled teacher, also dressed in the style of that day. Every detail was complete and faithful in reproduction, some of the pieces being authentic antiques lent for the occasion. Just outside the door the visitor stepped smack into 1938 with its brand new models in school seats.

In another part of the building a second class was in progress, this one thoroughly up to date, showing how the classroom can be transformed into an auditorium merely by changing the seating arrangement—all quite simple as the pupils demonstrated. Then while on the subject of seating there were shown two styles of pedestals in two sizes on which were built an amazing assortment of desk models.

Radio and phonograph combinations, centralized radio systems and public address systems were shown with refinements, evidence of the constant study that is being given to this ever growing field. On all his sound cabinets a manufacturer has installed a foolproof switch, making it impossible to go by your stop. A master switch makes it possible to talk to all classrooms in the event of any emergency. And if there are any complaints about the inability to hear announcements at outdoor events, a 100-watt speaker is available for that express purpose. It requires no electric field, and can be heard for a mile.

There is hope for those who have difficulty in hearing. Ear phones and acousticons have undergone changes with the times and are now able to

perform all kinds of wonders. Significant developments were shown for the first time.

Although much has been heard of it the white blackboard was on hand to demonstrate for itself the advantages that have been claimed for it. Projection equipment, it is unnecessary to state, grows apace. A substantial crowd invariably encountered in certain sections of the hall attested to the great interest in visual aids.

Clean buildings and sanitary floors do not represent the problems that they once did. In fact, there is little excuse for a school plant that does not appear immaculate at all times with the modern cleansing preparations and methods that are available.

One large bus manufacturer presented an effective story of school transportation, with an engine mounting that delighted the eyes of the mechanically minded.

These are to mention but a few of the highlights. Interesting developments too numerous to describe were lined up for the inspection of the visitors, who came, saw and went away impressed with the fact that 1938 is going to be a good school year.

Patry Tells How to Deal With Handicapped Child

Five precautions to be used in dealing with the physically handicapped child were presented by Dr. Frederick L. Patry, consulting psychiatrist for the Anderson School, Staatsburg-on-Hudson, before the American Association of School Administrators. They are as follows:

1. Understand adequately each child's nature and needs so that the demands will not be heavier than his ability to meet them with a feeling of wholesome challenge.

2. First discover his relative strengths and build upon these. Society is concerned with what he can do even though it be his "poor best." Avoid unfair comparisons. Help him to beat his own score.

3. Be especially alert for the child with minor or borderline handicaps. Close cooperation with the physician with repeated medical examination is essential.

4. Although he will need more attention than the average child, do not do for him what he can do for himself. Treat him as much as possible as a normal child.

5. Inculcate attitudes of self-adequacy, self-respect and a growing confidence in his ability to find a useful niche in life. Prevent conflict of difference, and yet educate him objectively to accept his limitations.



Laurence Vredevoogd, left, and Louis L. Forsythe of Ann Arbor, Mich., and Frank E. Ellsworth of Western State Teachers College, Kalamazoo, Mich.



Retiring President Charles B. Glenn

"Educational Temperatures" Taken

Thermometers are now being devised to measure the "educational temperatures" of secondary schools in a seven-point study reported before the American Educational Research Association.

The Cooperative Study of Secondary School Standards has devised seven distinct methods of measuring the quality of a secondary school and has applied these measures to 200 carefully chosen schools, both public and private, in all parts of the country. Reports have been made to each school of its standing by means of a series of 150 thermometers. By means of these thermometer scales a school can see exactly where it stands with reference to other schools of its size, type or location. This is expected to stimulate improvement in areas in which the school's standing is unusually low.

Evaluation based on the seven methods are: (1) scores on 1,100 checklist items and 400 evaluations, made by the schools themselves and revised by committees of experienced educators; (2) general qualitative judgments of visiting educators; (3) growth in the major curricular fields as measured by a series of standard tests given to 17,000 pupils at the beginning and end of a school year; (4) records of 13,000 graduates of the 200 schools who entered 1,300 institutions of higher education; (5) records

of 7,000 former pupils in the same schools, both graduates and nongraduates, who did not continue their formal education beyond the secondary school; (6) judgments of 17,000 pupils on guidance, pupil activity and other phases of their school life, and (7) judgments of 7,000 parents of seniors concerning twelve different aspects of the secondary schools attended by their sons and daughters.

Dr. Walter C. Eells is coordinator of the cooperative study.

Improved Classroom Techniques Must Wait for New Facilities

Although the unit assignment has been found "the most significant innovating practice" in classroom instruction, it is used in relatively few high schools, Arthur K. Loomis, superintendent of schools, Shaker Heights, Cleveland, said in discussing modern classroom techniques Monday afternoon.

The textbook method is still in use in some of the "best" classrooms because adequate classroom libraries and study halls with library facilities are still lacking, he pointed out. Elimination of the textbook method also is contingent on a supply of well-trained and resourceful teachers in the use of better methods.

"The most serious defect of the modern high school on the side of methodology is the almost complete failure to provide for actual experience in using distinctively modern methods of investigation," he said, citing the historical, scientific and mathematical methods. The historical method is applicable to the detection of propaganda, he added.

Wise Administrators Achieve Democracy Through Pooling Knowledge of Teachers

The welfare of administrators is inextricably bound up with the welfare of teachers. The wise administrator, realizing his own limitations of time and ability, utilizes to the full the organized knowledge and interests of his teachers.

This was the keynote of the address of Orville C. Pratt, superintendent of schools, Spokane, Wash., before the seventh general session of administrators on Wednesday morning.

Business long ago recognized that the qualities that tend to win popular elections are not those most needed by an executive and so organized itself in corporation form. As cities grew and school systems became large, school boards were similarly organized in corporation form and for a similar purpose, to obtain expert leadership, Mr. Pratt pointed out.

In a brief résumé of various phases of teacher welfare, Mr. Pratt cited: (1) teacher participation; (2) school finance; (3) salary schedules to promote

professional growth and prevent too rapid turnover; (4) retirement; (5) active advocacy of tenure laws; (6) equalizing academic freedom, and (7) cooperative action by teachers, such as death benefits and credit unions.

"In some influential quarters," Mr. Pratt said, "we are quite commonly represented as being a pharisaic, not to say parasitic, group of chairwarmers, more interested in playing political bridge to hold our own jobs than in teacher and pupil welfare. What we need to do is to ignore what representatives of other organizations may say about us in a derogatory way, except as it may serve as an incentive for us to ask ourselves, individually and collectively, what more can we do for teacher-pupil welfare."

"When teachers feel that the administrators are considerate and fair, the problems of administration are much easier to solve. The gap between viewpoints is not so great and small concessions can bring them together."

Misner Pleads for Cooperation in Developing New Curriculums

A plea for cooperation in organized education beyond the walls of school buildings and extending to community adults was made by Paul J. Misner, superintendent of schools, Glencoe, Ill., before the Department of Supervisors and Directors of Instruction on Monday afternoon.

"Democratic cooperation implies opportunities for all persons to make distinctive contributions to the solution of socially significant problems. It demands that persons who implement policies participate in their formulation. Educators, alone, can't save the world. In cooperation with others something may be done."

Crime Prevention Begins in School, Warden Lawes Believes

Warden Lewis E. Lawes of Sing Sing laid squarely in the laps of schoolmen the problems of penology and their complicating factors of social adjustment when he spoke before the A. A. S. A. convention on March 1.

Not minimizing other factors in delinquency, such as broken homes, lack of religious training and dearth of recreational facilities, the warden contended that schools generally have failed to fulfill their obligation in developing desirable character traits and good social habits.

Schools are too prone to permit those very pupils to leave school who have the greatest need for its socializing influence and its training in the manual arts, he said.

"If the antisocial conduct of many can be traced primarily to lack of education, certainly those were the very beings whom the school failed to attract," he asserted. "Until education can show conclusively its ability to arouse the vast majority of such individuals so they will continue their studies, the school has no right to claim that it is properly fulfilling its rôle as a crime preventive agency."

"If education is to play a much more important rôle in minimizing delinquency," he continued, "it must adopt proper procedures for ascertaining the abilities of pupils. If youngsters can study in their field of interest it rarely is difficult to induce them to master some trade."

Wants More Trade Schools

"More trade and vocational schools should be established. Some people may reject this suggestion because it would mean an added burden to the taxpayer. Let me again remind these individuals that increased budgets for such institutions will eventually mean decreased budgets for prisons."

Warden Lawes believes mass education to be a fundamental defect in our educational structure and asks that more attention be paid to adapting curriculums to individual needs.

"If men now in prison had been given special aptitude tests while in school and trained for the type of work for which they showed some inclination, many would now be social assets instead of social liabilities," the warden stated. He feels that forcing children to study subjects that hold no interest for them is one of the important contributing causes of truancy.

Another important cause cited is the presence of physical defects. He recommended periodic examinations by competent doctors and psychiatrists and a systematic corrective program. This program should include the employment of a staff of trained social workers who are capable of diagnosing and correcting antisocial conduct and warped conceptions, to help counteract bad home environment.

To teach a convict a trade is folly, the warden thinks, because nearly all avenues of employment are closed to the man with a prison record. Not only the majority of private firms but also the state refuse employment to former convicts. All the weapons of organized labor are denied him. He cannot obtain a license in any trade and is barred from many unions.

Schools Can Build Structure for Peace

A structure for permanent peace, built by teachers, by children and by men and women in every walk of life, was visualized by Francis B. Sayre, U. S. assistant secretary of state, in addressing members of the American Association of School Administrators.

This structure must have strong moral foundations, Mr. Sayre said, and in it there must be no place for materialism and greed. It is here that schools can function in giving children a true conception of American ideals and traditions.

Secretary Sayre recommends that schools give more time to teaching subjects that will serve to build up trust and confidence between nations and establish a belief in the sacredness of obligations.

"It is time that we awoke to the fact that civilization depends upon accepted moral standards among nations no less than among individuals," declared Mr. Sayre. "The security and happiness in the world as well as in the home and in the nation depend upon the restraints that are born of moral and spiritual concepts."

Mr. Sayre places little confidence in attempts to achieve peace through emotional appeal. Neither does he believe that treaties and compacts between nations are enough. Only understanding and self-denying cooperation between nations can bring lasting peace, he feels. It is a thing of the spirit.

Defects in School Plant Blamed for Loss of Time by Teachers for Illness

Glaring defects in school housing facilities are blamed for loss of time in classroom teaching in which 285,000 teachers lose annually a total of no less than 2,000,000 teaching days.

This conclusion has been reached from a study of the health of 5,150 teachers by a committee of the National Education Association, headed by Mrs. Mary D. Barnes, Continental School, Elizabeth, N. J. The evidence is presented in "Fit to Teach," a 260-page volume constituting the ninth Yearbook of the Department of Classroom Teachers.

Some of the worst defects listed are as follows:

1. Lack of comfortable rest rooms for teachers. This was rated first in frequency as a factor injurious to health.
2. Noise outside the classroom. This complaint was named second in frequency but first in order of importance.
3. Defective ventilation.
4. Dusty classrooms.
5. Lack of sanitary and convenient equipment for drinking water.
6. Improper lighting.
7. Lack of sufficient and sanitary toilet facilities.

In spite of the defects mentioned, the report points out that teachers have as good health as they probably would have enjoyed had they entered some other vocation. The once widely held impression that teachers are semi-invalids or physically incompetents is erroneous.

Teaching Burdens Are Rated

Teaching burdens regarded as most injurious to teachers' health are reported as follows: (1) oversized classes; (2) overly difficult pupils, and (3) overtime teaching. Teachers rated too much outside preparation as the least obnoxious of their teaching burdens.

"Fit to Teach" outlines health practices for teachers themselves, and for the consideration of boards of education and suggests needed changes in the school plant.

Other members of the committee that prepared this book are: Sara H. Fahey, Girls' Commercial High School, Brooklyn, N. Y.; Mary E. O'Connor, Commercial High School, New Haven, Conn.; George O. Ross, Ann Arbor High School, Ann Arbor, Mich., and Thomas D. Wood, professor emeritus of health education, Teachers College, Columbia University.

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Education Professors Criticize Their Own Graduates in Symposium on Culture

Teachers unable fully to appreciate or interpret the life and culture of today, teachers without a philosophy of education, teachers with meager knowledge of economics, political science and sociology—these formed the disheartening picture of their own graduates drawn by educators in a symposium before the National Society of College Teachers of Education.

Dr. George W. Hartman, associate professor of education, Teachers College, Columbia University, makes three charges against teachers. He says that:

Teachers show no more intelligence in voting for national political candidates than do the rank and file of voters.

They glorify health in their classrooms but are hostile or indifferent to socialized medicine.

They hold contradictory points of view on certain subjects at the same moment. For example, they go in for individual profit-seeking but think they are guided by the social service motive.

Doctor Hartman's Suggestions

To correct this situation and to aid present and prospective teachers to understand our own and world cultures, Doctor Hartman made three suggestions: (1) that new emphasis be placed upon a systematic and integrated set of beliefs about man, nature and society, with particular attention to the results; (2) that personal adjustment be made to the facts and values concerned in the process of cultural change, and (3) that the view that the Good Man, the Good Life and the Good Society be accepted as interdependent educational aims.

Present day teacher training curriculums are pitifully lacking in instruction in the fields of economics, politics and sociology, thinks Dr. George D. Stoddard, dean of the graduate school of the University of Iowa.

"Yet it is in these difficult areas, especially, that teachers will be expected to make important pronouncements and interpretations," Doctor Stoddard observed.

Doctor Stoddard believes that a teacher, if ignorant of the forces playing upon individuals and social groups, may not only miss great opportunities in the guidance of pupils, but may actually be a source of confusion and bad counsel.

The pressure of the mores was cited by Dr. Charles C. Peters of Pennsylvania State College as the greatest sin-

gle factor in preventing change and retarding progress. Offenders along this line are often the "best people."

"If men and women could understand the nature of the mores and the function of the conscience in guarding them," Doctor Peters said, "and could realize that the call to the defense is not the call to righteousness, but rather to laziness and social disintegration, perhaps many of our citizens could discount the spell sufficiently to enable them to think clearly and unemotionally about proposals for the improvement of the social order."

Background for Intelligent Judgments

Dr. Edgar W. Knight asserts that what the typical teacher needs is a philosophy of education that will make him acquainted with modern economic, social and political problems. Doctor Knight is professor of history and education at the University of North Carolina.

"In recent years new types of instruction have been making fresh demands upon the teachers of this country," he declared. "In the light of these demands it seems necessary for increased attention to be given to the fields of economics, sociology and government. The cultural interests of our teachers need to be widened and deepened and a social consciousness developed.

"American society has a right to expect," he said, "the teacher to be, if not the best, at least a dependable representative of modern culture in the community in which he works and

lives. A program of general education should acquaint him with the various institutions and forces that influence modern life and with the contributions that the major fields of learning have made and are making today to the progress of civilization.

"If one of the purposes of education is to prepare men and women to make intelligent judgments on social, economic and political problems, teachers must be qualified to make such judgments; and, above all, must teachers of teachers be prepared to make such judgments."

Pleads for Fewer Methods, More Subject Matter Courses

More emphasis on subject matter in training courses for teachers and less on methods courses was asked by Mrs. Henry Grattan Doyle, president of the board of education, Washington, D. C., in an address at the Joint Conference on Teacher Education, February 26.

The first two years of a four-year course should be devoted to subject matter, Mrs. Doyle said, and the last two years should feature methods courses, general and specific, and practice teaching. Many teachers are lacking in thoroughness, she said, and in fundamental knowledge and accuracy.

Mrs. Doyle urged that more care be exercised in the selection of individuals entering teacher training institutions. Selections should be made, she believes, on the basis of health, personality and love of the profession, as well as on scholarship. Persons who are not willing to devote themselves unselfishly to teaching should not become teachers.

Picking a Winner in Teaching

Proficiency in the use of English, coupled with the ability to think and organize ideas for presentation, should form the basis for selecting persons who are to become teachers, Dr. Alexander J. Stoddard, superintendent of schools, Denver, told the American Association of School Administrators.

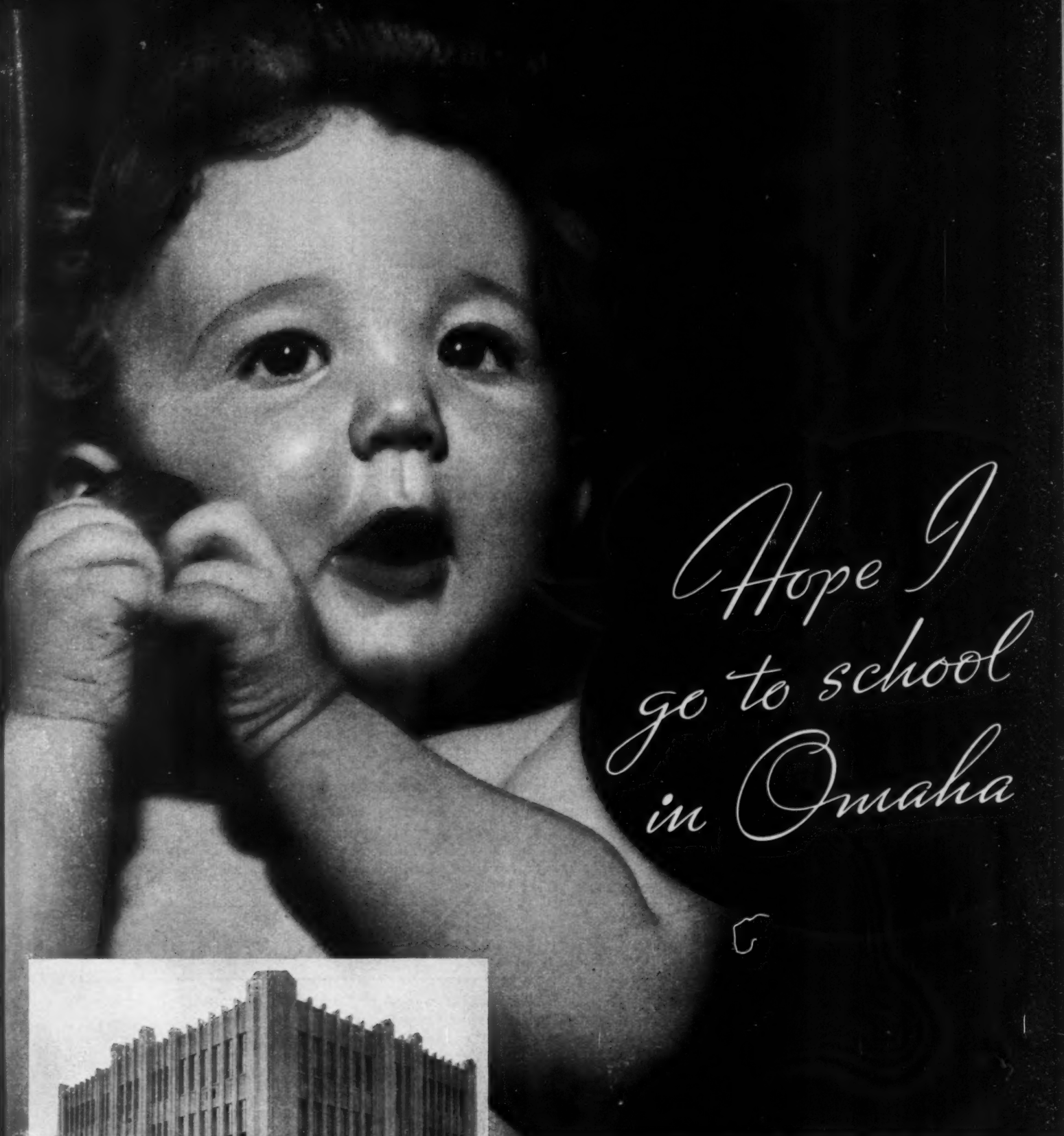
"Scholarship, culture, real interest in teaching and a reasonably attractive personality ought to be demanded even for the first step in the process of selection," Doctor Stoddard asserted. "It is fair to insist that only persons whose social and educational ideals are in reasonable accord with American traditions should be accepted."

Rigorous standards should be set up and competition should play a part in

determining those who are to become teachers, in Doctor Stoddard's opinion. He believes this process of elimination should begin in high school or even earlier. Those with neurotic tendencies should be advised not to teach.

There is no legitimate excuse for either initiating or continuing the professional education of a person showing mediocre ability or possessing evident deficiencies, in the hope that he may make good, the Denver administrator declares.

Doctor Stoddard suggests a counseling service in high school as a means of persuading capable pupils to choose teaching as a vocation. Thousands of teachers now are recruited through caprice or economic necessity, he states.



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Ryan Optimistic Regarding Improvements in Training for Human Understanding

Encouraging signs in training teachers for better understanding of children and adolescents were noted by W. Carson Ryan Jr., staff associate of the Carnegie Foundation for the Advancement of Teaching, in speaking before the National Society of College Teachers of Education on Wednesday afternoon.

Mr. Ryan cited the activities of various educational agencies and the scrutiny that schools and colleges engaged in the preparation of teachers are placing upon their own efforts.

Teachers' colleges, he said, are still seriously deficient in real essentials, especially in the sciences underlying the understanding of human beings.

"It is not proposed that teachers of children and youth shall be trained to be specialized psychiatrists, but rather that they shall have an understanding of the fundamentals of human behavior and the approach to work with children that has come out of psychiatry and related fields," he explained.

"Teachers need to be selected for admission to teacher training institutions on a different basis than at present, not primarily in terms of an academic scholarship record, but on a combination of factors that emphasize, along with genuine intellectual ability, a liking for people, skill in getting along with others, and interests that make them well-developed human beings."

Training Dull-Normal Types Will Enlarge Physical Plants

Borderline dull-normal children occupy no man's land in our usual curriculum setup of vocational training, according to Dean W. T. Root of the graduate school, University of Pittsburgh. He estimates that this group probably represents about 5,000,000 of the 30,000,000 U. S. school children.

"It will require a long-time program of study to predict the type of job and type of school work for the varying individual needs of this borderline group. The present academic high school and the technical trade school do not fit this group for life. We need repetitive training in the semiskilled trades and the similar types of farm training in rural districts."

Those of the dull-normal type marry, vote and are a part of civic life. What they need, Dean Root believes, is prolonged training in concrete practical situations and personal habits rather than in academic subjects.

Dual Language Problem Worldwide

The dual language problem affects one-half of the school children in the world. In nearly all Latin-American and Oriental countries and in many countries of eastern Europe, the language of the school is different from the language of the home. Scientific research can make a large contribution in these countries, according to Dr. Paul Monroe, director of the International Institute of Teachers College, Columbia.

Educate to Solve Life's Problems: Helen Keller

Education that digs deep into life was commended by Helen Keller, blind writer and lecturer, speaking at a general assembly of the American Association of School Administrators. Education that does not attempt to find solutions and understanding of basic problems relating to government, wages and one's daily needs is no education at all, she believes.

"It is a revelation to me how farsighted teachers are taking thought to organize and unify the complex mass of knowledge flooding our schools and to set up goals for intelligent effort," she told the administrators.

"The technique of building well-planned cities, keeping the land fertile and beautiful, and abolishing plagues from the earth is being imparted to pupils as equipment for a life responsibility," she declared, adding that efforts to abolish poverty and to use wealth for the common good are evidences of the gains made by education in these lines.

Pupils Have "Right" to Prepare for Employment in Industry

Another advocate for vocational education at the 1938 meeting of the American Association of School Administrators was Prof. Homer J. Smith of the University of Minnesota, who told educators that pupils have "as much right" to preparation for industrial employment as they have to preparation for college admission and professional earning.

Professor Smith contends that the individualized theory of education pays too much deference to the individual pupil and that this type of education is not applicable to present day trends. "Training, guidance, placement, follow-up, retraining, adjustment are primarily group matters, with secondary attention given to individuals within the groups," he stated.

"Industrial education at its best is good economics and good sociology. It helps the home problems as well as the work problems of those who pursue it. Each school system, large or small, must contribute in its own way after study of its own people. It is neither educationally, socially nor economically sound to restrict preparation for industrial pursuits to special schools and urban centers. Vocational training must be afforded geographical scatter by every means that we can devise."

We must think in terms of full-time pupils, part-time pupils, unemployed youth, apprentices and adult workers when we make our industrial education plans, according to the Minnesota professor of industrial education. These groups will make different demands.

Enrichment for Gifted Children

Are the gifted children in our schools being correctly educated or are they just serving time during the school year?

These questions were answered by Leta S. Hollingworth, professor of education at Teachers College, Columbia University, speaking before the American Association of School Administrators.

Doctor Hollingworth believes that many of these children whose superior ability permits them to cover the standard curriculum in about one-half the time required by average children are not making the most of their spare time.

A step in the right direction, she said, is the curriculum being worked out in Manhattan's Speyer School for children who test above 130 I.Q.

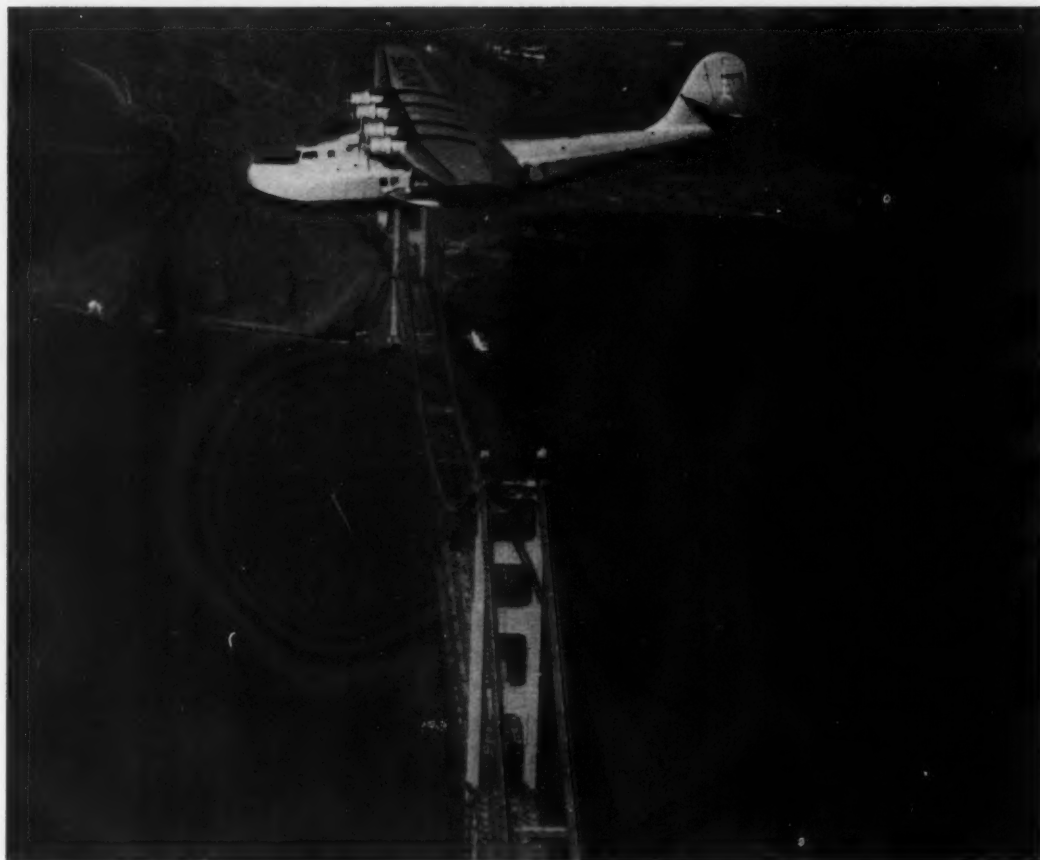
"The chief enrichment project being worked out," Doctor Hollingworth said, "is one that will give an understanding of the instruments, materials and techniques of civilized living, subsumed under the general heading, evolution of common things."

"The slow evolution of objects of common experience in the world as the children find it is traced from the rude beginning, and a knowledge is acquired of the persons whose minds and lives have effected such evolution."

The great value of these studies, Doctor Hollingworth pointed out, is that they do not duplicate material offered in the established curriculum.

The problem of the education of highly gifted children does not end with the elementary school, she said.

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Soft-Pedal Bookishness in Education for Adjustment to a World of People

A people-minded and machine-minded civilization for which special units in secondary education will be definitely designed was advocated by E. W. Butterfield, state commissioner of education for Connecticut, in speaking before the American Association of School Administrators.

The five units recommended are: (1) social study, (2) physical science, (3) cultural benefits, (4) information room and (5) industrial shops.

Of these units, the first and fourth would be definitely designed to develop pupils who are people-minded, the second and fifth those who are machine-minded, and the third those who include book-mindedness with the other two characteristics.

"In the days of our pupilage," the commissioner said, "there was then a world of books, of settled conventions, of rules, precedents and formulas into which college men entered and in which professors were living. This world still exists, but in it few of us live except for an hour a day. We have moved into a world of people.

Personnel People Asked to Train for Modern Life

"If higher education is ever to become individualized and to give each student the sort of preparation for modern living that he needs, the torch must be carried chiefly by personnel people," Dr. William H. Cowley, professor of education at Ohio State University, told the American Council of Guidance and Personnel Associations.

"We must first coordinate our philosophy. We believe that education must be for the whole student and not for his mind merely. Basically, the ideal of liberal education has been just this: the education of the whole man.

"Three points of view have almost depersonalized education. These are fixed curriculums, which force students into courses in which they have no interest; mass education, which sets up barriers between the student and the faculty, and German intellectualism, which asserts that the only function of the college is to train the mind."

Vocations Group Names Officers

Frances Cummings, director of education of the National Federation of Business and Professional Women's Clubs, New York, was elected president of the National Vocational Guidance

"Social study subjects already are well-developed in most growing schools. In these, pupils would continue to study together under teachers who are both guides and helpers.

"A second unit would be the one devoted to the physical sciences and especially to those which deal with biology, sociology, heredity, astronomy, meteorology and geology.

"A third unit would include music, art and literature acquired through study and production. Club and social activities of the school already have given clear evidence of the possibilities in this field. Here is a place, then, for foreign languages.

"A fourth unit would be the information room. It would assume that information getting is one of the great reasons for school attendance and that information getting is almost the only way in which education continues as an after-school life process.

"The fifth unit should be one for industrial arts. These shops would teach not trades but machines in operation and things in production."

Association at its meeting February 23 to 25. Dr. Warren K. Layton, Detroit, was named first vice president; Elizabeth L. Woods, Los Angeles, second vice president; Dr. Roy N. Anderson, New York, secretary-treasurer; Cleo H. Bentley, New York, trustee.

Prevent Crime by Guidance Programs, Urges Studebaker

"Guidance programs in many of our schools today and educational programs for handling juvenile delinquency are probably doing more to prevent crime than all the corrective and punishment measures combined." John W. Studebaker, U. S. commissioner of education, is speaking.

Doctor Studebaker regards education of criminals as a potent corrective force. He outlined to the administrators a plan for increasing the effectiveness of crime prevention programs, which includes collecting, interpreting and correlating information regarding methods of prison education now in use.

In the future, Doctor Studebaker hopes to extend the activities of the U. S. Office of Education to cover both public education for crime prevention and prison education. This will call for close cooperation between organized education and authorities on crime.

Vocational Trend Toward Nation of Dependents

Instead of stimulating ingenuity and thereby producing new employment in which employees may be absorbed, vocational education is directed toward preparing a nation of dependents, charged Robert Hoppock of the National Occupation Conference at the afternoon session on March 2.

"Below the college level, virtually all vocational guidance has been directed to preparing employees, who are helpless when there is no one to hire them," he pointed out.

"We have trained employees so well that less than a third of all their failures are due to technical incompetence. But for six years prior to 1929, three-fourths of all employer failures were due to the internal causes of incompetence, inexperience, lack of capital and unwise credits. Might we not wisely spend a little less time in damning employers, and give a little more attention to training them?"

Association Is Boon to Rural Teachers

A county classroom teacher association solves the problem of bringing a great number of rural teachers into an organization. By a series of social and forum meetings the county association makes possible not only the advantage of professional association but also provides an opportunity for social activities. This was only one angle of a paper by Clyde B. Cochran, executive secretary of the West Virginia State Classroom Teachers Association, on how such organizations may serve the community.

"Break Down Barriers Between Town and Gown"

What is the trouble with college personnel work?

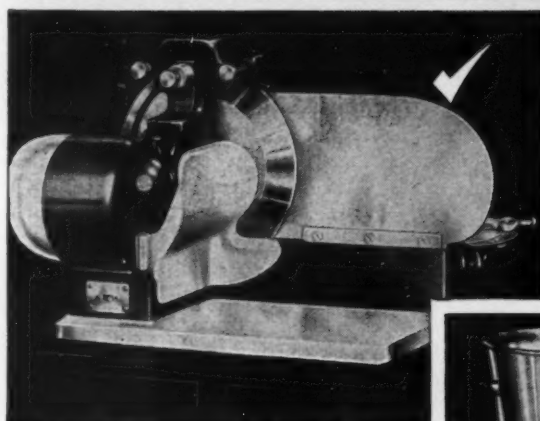
A consulting engineer from Philadelphia, Morris L. Cooke, undertook to tell the American Council of Guidance and Personnel Associations. He sees three weak spots:

1. Too many academic teachers do nothing outside their particular competence.
2. Personnel workers do a better job on the machinery of personnel work than on the human contact side.
3. There is a lack of organization in the personnel field.

Break down the barriers that separate Town and Gown, Mr. Cooke advises.

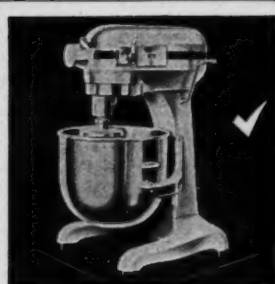
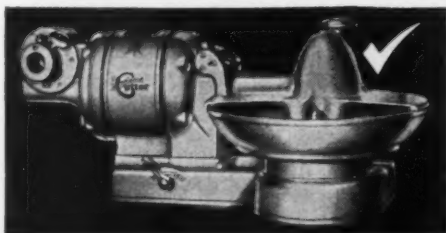
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SLICERS regulate and insure *uniform*, attractive servings of all sliced foods at definitely *known costs*, with savings in time and labor.

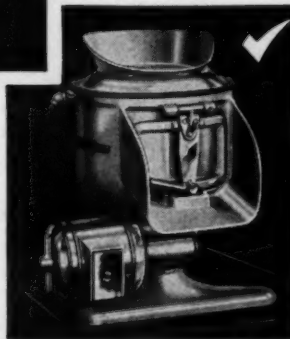
AIR WHIPS (right) increase yield, make finer quality of whipped cream.



MIXERS in complete range of sizes from 10-qt. to 80-qt. -110-qt. capacities to fit the needs of any size kitchen!

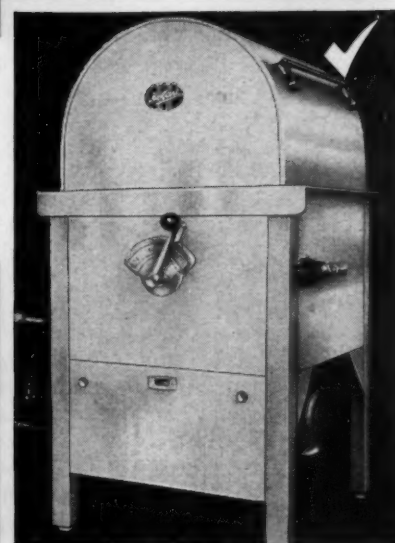


DISHWASHERS and Glasswashers maintain high degree of cleanliness; eliminate chipping, marking; reduce all dishwashing expenses. New Model "LM" features large capacity in small space.

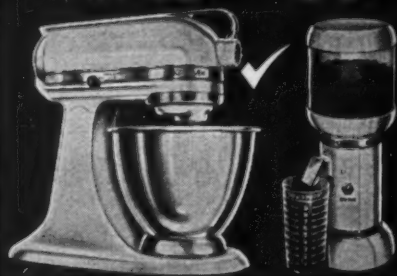


POTATO PEELERS quickly pay for themselves in saving of "peel-loss" alone.

FOOD CUTTERS (left) work with lightning speed; contribute savings in the use of left-overs.



TWO KitchenAid PRODUCTS



FOR YOUR HOME, new Model "K" complete Food Preparer at half the price of famous Model "G". New Household Coffee Mill: freshly-ground coffee in correct grind for any method of making, at snap of the switch.



Check ✓ the coupon now for complete facts on **EXCLUSIVE ADVANTAGES** of latest Hobart Models.

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| <input type="checkbox"/> KitchenAid Food Preparer | <input type="checkbox"/> KitchenAid Coffee Mill | |

Name _____
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 City _____

NEWS IN REVIEW

Allocation for Education

A radio tower on a hilltop or at some convenient spot probably will be a characteristic adjunct of many American schools in the future, replacing the once characteristic school belfry.

The Federal Communications Commission in January set aside twenty-five channels between 41,000 and 42,000 kilocycles in the short-wave field for exclusive use by nonprofit agencies for the advancement of education. This allocation for education was made at the request of John W. Studebaker, U. S. commissioner of education, who hopes that it will be utilized by public school systems, colleges and universities. In many instances it is expected these stations, ranging in power from 100 to 1000 watts, will broadcast program material direct from specific sources into classrooms. The licenses also will authorize the broadcast of educational and entertainment matter to the general public, but no sponsored programs will be permitted.

Commenting on this announcement and what the decision can mean to American education, Commissioner Studebaker said:

"It is almost impossible to imagine the variety of uses to which the nonprofit educational stations may be put. They will be used to stimulate the interest of pupils in subjects they would not ordinarily be eager to learn. This is being done at present, to a limited degree, in some cities over commercial stations. Detroit is engaging in such broadcasts. There will be broadcasts to classrooms as there are now to science classes in Rochester.

"Model lessons broadcast by especially expert teachers in various subjects will gradually improve classroom teaching. Cleveland is one city now following this practice. The University of Wisconsin's radio classes in singing doubtless will be duplicated in many other areas.

"Emergency use of radio for educational purposes is an important consideration. Chicago and Long Beach have made emergency use of radio to reach pupils in their homes when schools were closed.

"These frequencies can be a great boon to the isolated rural school with its one or two teachers. At present county superintendents or supervisors may be able to visit each school in the county or district only once or twice a year. Establishment of a radio station in conjunction with a county school

system would enable the superintendent or supervisor to be in constant touch with all schools. The rural school curriculum could be vastly enriched through the proper development and use of education by radio."

Since these local nonprofit educational stations will be authorized to transmit educational and entertainment programs to the general public in every city and town maintaining such a station, Commissioner Studebaker pointed out that with this broad charter programs for educating adults may be extended beyond anything existing.

The kilocycles allocated are distinctly local in character. They will be serviceable at a radius of 5 to 15 miles from the transmitter. Reception will depend to a considerable degree on the height of the transmitter.

A warning of certain limitations at present governing use of the broadcasting facilities reserved for nonprofit educational agencies was issued by Commissioner Studebaker. The Office of Education will at once collect necessary information to help educational organizations know how to make application for these frequencies and to supply advice on operating problems.

MEETINGS

Consider Third Decade

With the achievements of two decades behind the organization, the Progressive Education Association at its national conference in New York, February 23 to 26, looked forward to the tasks of the next decade in its program.

Meeting with the association on the opening day of its conference were the Child Study Association of America, the United Parents Association of New York City and the National Congress of Parents and Teachers. Among the speakers on that day were Alice V. Kelliher of the commission on human relations of the association; Sidonie M. Gruenberg, director of the Child Study Association of America, and Dr. William E. Blatz, St. George's School, Toronto, Ont.

The highlight of the second day's program was the section on the social frontiers of America at which the speakers were from the fields of industrial relations, government and social relations.

The program of education within the next decade was launched at the morn-

ing session on February 25 at which Carleton Washburne, superintendent of schools, Winnetka, Ill., presided. Among the speakers were Harry Elmer Barnes, historian and commentator, and David Cushman Coyle, economist.

William H. Kilpatrick acted as chairman of the section appraising progressive education of the last twenty years. Speakers included Harold Rugg and Louis Hacker, both of Columbia University, and R. M. Ogden, Cornell University. Another section on that day heard Robert Ulich of Harvard University discuss "Frontiers for Reconstructing the Program for Education of Teachers." That evening P. C. Chang, eminent Chinese educator, spoke on "Civilization and Social Philosophies."

On the final day, the conference heard Robert S. Lynd, Columbia University, and Helen M. Lynd, Sarah Lawrence College, authors of "Middletown" and "Middletown in Transition," speak on "The Cultural Conflicts America Faces."

To Convene in Milwaukee

The thirty-fifth annual convention of the National Catholic Educational Association will convene at the auditorium in Milwaukee, Wis., April 20 to 22. During the three-day convention there will be sessions on the parish school, secondary school, college and university, and seminary departments, and the minor-seminary section and Catholic blind education section. There will be a commercial exhibit of school books and supplies and an art exhibit of pupils from Catholic schools in all parts of the country.

PROPAGANDA

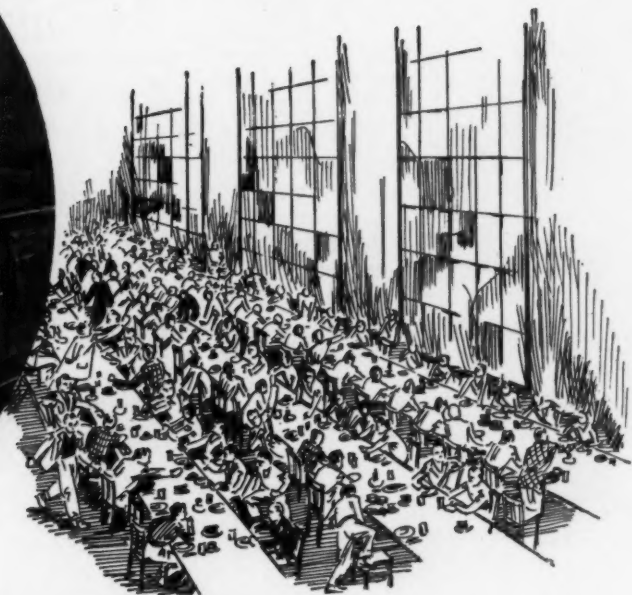
Takes Exception

The secretary of the Institute for Propaganda Analysis, Clyde R. Miller, takes exception to an editorial in the February issue and sends, in rebuttal, the following letter:

"Recently *The NATION'S SCHOOLS* published an editorial about the Institute for Propaganda Analysis and its proposal to help intelligent citizens detect and analyze propaganda. In this editorial you quoted from an attack on the institute prepared by one of America's leading propagandists, Edward L. Bernays, and apparently disseminated by Mr. Bernays among thousands of American educators. You indicated that there was considerable merit in Mr. Bernays' criticism of the institute.

"The institute, we have explicitly pointed out, does not know all the answers, does not claim to be infallible,

*They want what they want
when they want it—*



and **GARLAND**
Gas Fired Equipment delivers!

**GAS IS THE
IDEAL FUEL**

and at Its Best with Gar-
land Heavy-Duty Equip-
ment.



● Twenty-two hundred students at Texas A. and M. College sit down at one time, and with all the exuberance of youth-in-a-hurry these twenty-two hundred youngsters clamor for "food—food—food!" Failure to deliver would occasion a riot of major proportions.

But there are no failures. The proven efficiency of Garland gas-fired equipment insures that these twenty-two hundred meals (whether they call for 10,000 flapjacks, 1600 pounds of French fried potatoes or 300 dozen fried eggs) will be served on time—and economically.

These same elements—dependability, efficiency, and economy—have made Garland gas-fired equipment the choice in a large percentag of the nation's hotels, restaurants, schools, and hospitals. Let us explain how our more than seventy years' experience can be of value to you, too.

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and therefore welcomes adverse criticism. Readers of *The NATION'S SCHOOLS* who are interested in the institute's effort to help the intelligent citizen analyze propaganda should know two important facts about Mr. Bernays' attack:

"1. Much of what he said about the institute was predicated upon his misquotation of the institute's definition of propaganda. This is not a technical matter. If the institute's definition of propaganda were what Mr. Bernays said it was, much of what he wrote in his attack would be justified. The institute's definition is as follows: 'As generally understood, propaganda is expression of opinion or action by individuals or groups deliberately designed to influence opinions or actions of other individuals or groups with reference to predetermined ends.' In quoting this definition, Mr. Bernays inserted the word 'private' just before the word 'predetermined'. That makes a great deal of difference and certainly a difference which is a matter of vital interest to everybody concerned with public education.

"2. Mr. Bernays said in effect that the public couldn't look to the institute for any worthwhile results because to have such results it would have to carry on a program of research and publication which Mr. Bernays proceeded to outline in his criticism. Most of that program was the institute's program from the very outset. By outlining such a program, Mr. Bernays implies that it is not the institute program.

"What seems to disturb Mr. Bernays especially—and this point was brought out in a discussion before the Scholia Club recently at Columbia University—is the fact that the institute actually is attempting to make the recognition of propaganda so simple that even pupils in high schools can readily recognize propaganda when they see it or hear it. It causes one to wonder what in the world he is afraid of.

"The institute has written Mr. Bernays with reference to the two points mentioned above and has suggested, under date of Nov. 17, 1937, that he send to persons who received copies of his initial attack the institute's answer to that attack. Thus far we have had no indication that he will do this.

"To repeat, this is not a matter of technical difference. It is a matter of concern to all persons who see the imperative need in a democracy for the detection and analysis of propaganda. Particularly is this a matter of concern to readers of *The NATION'S SCHOOLS*."

ADMINISTRATION

Public Relations Foresight

Every eligible voter in the central school district of Goshen, N. Y., prior to the special school election, received a pamphlet describing the proposed \$775,000 new central school project, to be voted on two weeks later. Whatever opposition had been voiced against the project concerned cost, which was explained by the school board.

Reduction in One-Teacher Schools

During the last six years efficiency and economy in education administration have led to a definite trend in the reduction of the number of one-room, one-teacher rural schools in Oregon. Statistics of the Oregon State Department of Education show that there were 1077 such schools in operation during the school year 1936-37 compared with 1326 in 1930-31, or a decrease of 249. This represents a reduction of 18 per cent, brought about in a period of six years through consolidation, suspension or an increase in enrollment which made it necessary that another teacher be added.

The number of one-teacher high schools in Oregon has decreased in the same length of time from thirty in

1930-31 to five in 1936-37. Twelve of the thirty high schools that employed only one teacher in 1930 have added one or more teachers. High school enrollment during this time has grown from 48,000 to more than 60,000, an increase of 25 per cent.

PERSONNEL

To Encourage Travel

A bureau to encourage travel by teachers for international good will and to provide finances for the World Federation of Education Associations has been established at its Washington headquarters, 1201 Sixteenth Street, N. W. The cost of the tours is kept at a minimum to enable as many teachers as possible to travel.

Optimistic Report

Seventy more candidates for teaching positions were placed by the University of Missouri during 1937 than for a corresponding period of the previous year, it has been reported by R. L. Davidson, chairman of the committee on recommendations of the university. Mr. Davidson's report also shows that the median salary for candidates securing positions in 1937 was \$1156, an increase of \$139 per candidate over the previous year.

FINANCE

Board Adjusts Salaries

An adjusted salary schedule for teachers, providing a maximum of \$1670, reached through ten years' teaching experience, has been adopted by the board of education of Zanesville, Ohio. By having five years of college work and a master's degree, a teacher can reach a maximum salary of \$2070. The action of the board came as an effort to adjust a 10 per cent salary cut not previously restored.

58.2 Cents Per Pupil

Fifty-eight and two-tenths cents a day for each pupil enrolled in the Denver public schools has been allocated in the budget adopted for the 1937-38 school year. The figure of 58.2 cents a day for each pupil is based on current, or operating expenses, and does not include appropriations for debt service or capital outlay.

The expenditure of the 58.2 cents is distributed as follows: For general control or central administration for each pupil, 1.6 cents; for maintenance of buildings, 1.6 cents; for operation of the school plant, 3.9 cents; for coordi-

Coming Meetings

March 11-12—Junior High School Conference, New York University, New York City.

March 17-19—North Carolina Education Association, Raleigh.

March 20-22—South Carolina Education Association, Columbia.

March 24-26—Representative Assembly, Michigan Education Association, Lansing.

March 24-26—Alabama Education Association, Birmingham.

March 24-26—Florida Education Association, Tampa.

March 25-26—Southern Division, Illinois Education Association, Carbondale.

April 13-16—Kentucky Education Association, Louisville.

April 14-16—Georgia Education Association, Atlanta.

April 16—Massachusetts Teachers Federation, Boston.

April 19-23—Association for Childhood Education, Cincinnati.

April 20-22—National Catholic Educational Association, Milwaukee.

June 6-10—Short Course for School Cafeteria Managers, Oklahoma A. & M. College, Stillwater.

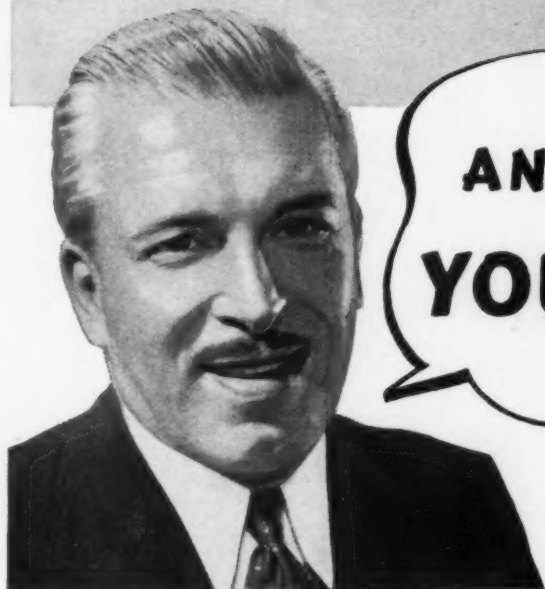
June 13-18—American Library Association, Kansas City, Mo.

June 26-30—National Education Association, New York City.

Oct. 27-28—Indiana State Teachers' Association, Indianapolis.

Oct. 27-29—Minnesota Education Association, Minneapolis.

PALMOLIVE "Measured Soap" SYSTEM NOW AVAILABLE WITH GLASS or ALL-METAL RESERVOIR



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YOU'LL SAVE MONEY!

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- **MEASURED AMOUNT OF SOAP . . .** Two operations of the plunger deliver just enough Palmolive Soap for one good wash.
- **SAVES 30% TO 40% ON SOAP COSTS . . .** Tests prove this system gives *100 washes for 1¢!*

Investigate—TODAY! For more information on the Palmolive Soap System or any of your soap needs, write to Colgate-Palmolive-Peet Company, Industrial Dept., Jersey City, New Jersey.



PALMOLIVE "MEASURED SOAP" THE NEW, ECONOMICAL DRY SOAP SYSTEM

A Cheer for the Team!



Ohio State University gymnasium is quieter with this noise-absorbing ceiling of Armstrong's Corkoustic.

AND ANOTHER FOR THE CORKOUSTIC CEILING THAT HELPS CONTROL NOISE!

YOUNG voices shout as another goal is scored. But the noise doesn't reverberate and echo in Ohio State University's gymnasium—thanks to the Corkoustic ceiling. Made of cork, Corkoustic ceilings absorb unwanted noise the way a sponge soaks up water.

Corkoustic can make your classrooms, halls, offices, and swimming pools quieter. It can improve hearing conditions in auditoriums, studios, and music rooms.

Easy and inexpensive to install, Corkoustic can be applied to your old ceilings without interrupting classes. Its light-reflection value is exceptionally high. Its distinctive texture and pleasing colors make it a decorative interior finish.

Find out today how Corkoustic ceilings can control noise in your school. Write now for a free copy of "How to Reduce Noise." Armstrong Cork Products Company, Building Materials Division, 1234 State Street, Lancaster, Pennsylvania.



Armstrong's CORKOUSTIC

nate activities, such as field work, medical and dental attention, 0.9 cents; for fixed charges, 2.3 cents; for auxiliary agencies, such as bus service, playgrounds and supplies for indigent pupils, 0.5 cents, and for instruction, 47.4 cents.

Cooperative Buying Proves Saving

By buying books and supplies by a cooperative plan the schools of Hennepin County, Minnesota, were saved \$1657.45 during last year, according to Robert E. Scott, superintendent. Sixty schools in the county participated in the plan. Textbook orders were pooled in the county superintendent's office where the books were wrapped and packed separately for each school district.

PUBLICATIONS

Conservation Bibliography

A distinguished committee of members of the American Association for the Advancement of Science has prepared a bibliography on conservation of natural resources with the cooperation of the Enoch Pratt Free Library of Baltimore. Copies of the bibliography may be obtained from the permanent secretary of the A. A. A. S., Smithsonian Institution Building, Washington, D. C. The preparation committee includes the following: Dr. Joseph L. Wheeler, chairman, Enoch Pratt Free Library of Baltimore; Dr. Edward W. Berry, Johns Hopkins University; Dr. Paul R. Heyl, Bureau of Standards, Washington, D. C., and Dr. Burton E. Livingston, Johns Hopkins University.

INSTRUCTION

Going to College?

Approximately 200 seniors enrolled in the Evanston High School, Evanston, Ill., attended the opening in February of this year's fourth annual college problems class, conducted by Francis L. Bacon, principal of the high school. Held during the thirty-minute assembly periods of the high school, the classes are designed to answer the questions coming to the high school principal from seniors who are contemplating college entrance.

The most frequently discussed subjects deal with the credits various colleges require and accept; the problems of the East *v.* West and the small college *v.* the university, and the courses recommended for those interested in definite professional training. Time is to be devoted to the discussion of schol-

arships and how they may be obtained, and to means of earning expenses while in college.

Cadet's Reading Remedied

Kemper Military School, Boonville, Mo., has instituted a new remedial reading course following the discovery that the academic difficulty of some cadets was not due to a lack of application, but rather to faulty reading habits. The Iowa Silent Reading Tests were taken by the entire corps to form the diagnosis of each case.

Ed. 232.2

"Ed. 232.2—Development of Appreciation of Certain Cultural Influences" is the technical title of a new course to develop appreciation for radio and motion pictures being offered by Wayne University, Detroit, for the first time this semester. In offering this course the college of education has as its objective the furnishing of a background to enable the student to discriminate between the good and bad in radio programs and in motion pictures and to guide the development of similar discriminations in their pupils.

Vocations as Florists

Defiant of the freezing weather, school officials in New York City have voted to establish a course in the florist trade for vocational pupils. A need exists, it is claimed, for training in making up corsages, caring for cut flowers and in arranging attractive floral displays. In the suggested four-year course every phase of work in connection with operating a florist shop or a greenhouse is to be considered. The classroom is to be arranged in the form of a flower shop, the pupils caring for the plants, arranging bouquets for weddings or funerals, learning the art of designing and receiving instruction on how to cut flowers properly.

To Revise Vocational Curriculum

Vocational courses in New York City are to be revised and brought up to date to keep pace with the rapid changes in industry. A series of conferences is being planned to which educational experts, business leaders and high school teachers are invited. At these meetings plans to expand and modernize the vocational curriculum will be studied. It is expected that the revised course can be introduced next September.

Teachers Learn Traffic Safety

Forty Colorado high school teachers were enrolled in the first training course in traffic safety education to be held in Colorado. The course was con-

For Economy's Sake

Cleanliness is taken for granted in a school—or should be. Surely nothing can be allowed to prevent floors of utmost cleanliness and sanitation. So we say, for economy's sake let us show you what you can do with a Finnell. It's the *low cost* way of getting clean floors and keeping them clean. Below, the 100 series with tanks, as used in scrubbing. The same machines will wax, polish and dry clean. Interchangeable brush ring adjusts the large machine for small areas. It's like having two machines in one,—another economy.

Let us show you the savings possible on floor finishes too. How to seal new floors, how to preserve them, how often to wax or scrub, what wax to use,—these are just some of the questions we will be glad to answer not at random but after careful study of your floors and their condition.

For this service, for a survey of your floors, for a demonstration of any Finnell product, any Finnell machine, address Finnell System, Inc., 203 East Street, Elkhart, Indiana.

FINNELL SYSTEM OF FLOOR MAINTENANCE

POLISHERS • SCRUBBERS
WAXES • FINNELL KOTE • SEALERS
CLEANSERS • MOP TRUCKS • MOPS
APPLICATORS • WATER ABSORBERS



ducted on the University of Denver campus in January under the joint auspices of the Colorado State Department of Education, the University of Denver and the American Automobile Association. Prof. Amos E. Neyhart and Dr. F. R. Noffsinger were instructors. Teachers attending the course are expected to conduct traffic safety training institutes in their respective counties in which they will instruct other teachers as well as their own pupils.

High School of Science

Plans for a new high school of science, to be devoted exclusively to the preliminary training of pupils who hope to become doctors, dentists, engineers, chemists and industrial research workers, were adopted recently by the New York board of superintendents. The new school, to be located in a re-conditioned annex of the DeWitt Clinton High School, the Bronx, New York, will be opened in September.

About 800 pupils will be admitted next year, but eventually the building is expected to house 2500 pupils interested in specialized scientific fields.

To Introduce Adult Education

Thirty-seven tentative studies for the School of Adult Education, Westfield, N. J., have been planned for the fall of 1938. This is a new local venture, the topics for study being taken from the lists of other successful schools.

WHO IS RESPONSIBLE?

Regardless of the amount of dirt tracked in, the amount of time available, or the equipment he has to work with, the janitor is held responsible for the cleanliness of the school.

Leading educators have proven that a good vacuum cleaning system is the only equipment that can make rapid and thorough cleaning possible, and that no janitor can accomplish satisfactory results with antiquated methods.

The Spencer Central Vacuum Cleaning System has been endorsed by leading architects and educators and is solving the cleaning problem in more than 1500 schools.

Spencer Vacuum cleans wood, composition, cement or carpeted floors quickly, easily and thoroughly.

Ask your architect about the Spencer Central System for your new school. A demonstration with the Spencer Portable will show how these systems work.



CENTRAL AND
PORTABLE
VACUUM
CLEANING
SYSTEMS

THE SPENCER
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TRANSPORTATION

Defective Buses

Three months ago Illinois state police began an inspection of school buses that has disclosed approximately half of the vehicles carrying children lack much of the equipment essential to safety. Many buses were found to be in a dangerous condition, lacking proper brakes or lights. At the insistence of police, school authorities are correcting these conditions.

In some overcrowded buses children were forced to stand, cramping the driver and limiting his visibility. A dangerous kerosene stove was found in one, and in another the rear door was nailed shut. Others had cardboard replacing broken window glass, lacked flags and flares for emergency stops and signals for indicating intention to turn and some were without nonshatter glass.

Every mechanical defect was reported to school authorities. The Illinois patrolmen are repeating their inspection to see that corrections are made.

NAMES IN NEWS

Superintendents

FREDERIC ERNST, whose appointment as associate superintendent of schools in New York City was recently reported, has been assigned to head the high school division. He succeeds the late JOHN S. ROBERTS.

R. B. FISHER, superintendent of schools at Pampa, Tex., for the last nine years, recently was elected superintendent of schools, Corpus Christi, Tex., and president of the city's junior college.

W. S. HUFFMAN, principal of the schools at Carey, Ohio, has been appointed superintendent, succeeding W. L. ARNHOLT, who resigned to become head of the schools at Bellevue, Ohio.

GEORGE W. HALL, seventy-six, superintendent of elementary schools at San Mateo, Calif., for forty-five years, re-

It's a STRONG, SCIENTIFIC, SANITARY DESIGN

THE trim, neat design of the Heywood Sanitary Pedestal Desk actually promotes classroom cleanliness. It leaves a larger floor area noticeable to the student and thus deters those minded to litter the classroom with paper, etc. The single pedestals make for easy ingress and egress, too. Available in either adjustable or non-adjustable types, the Heywood Sanitary Pedestal Unit is soundly and scientifically built to answer modern classroom needs. May we tell you more in detail about this and many other practical designs of Heywood-Wakefield school furniture?



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Established 1826 GARDNER, MASSACHUSETTS

PROMPT care is important in preventing infected wounds. Even minor wounds may become infected when antiseptic treatment is delayed. Children and adults report injuries promptly when Mercurochrome is used, because treatment is not painful.

Mercurochrome, H.W. & D.
(Dibrom-oxymercuri-fluorescein-sodium)

is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions. In more serious cases, consult a physician.

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After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935) **MERCUROCHROME, H. W. & D.**
(Dibrom-oxymercuri-fluorescein-sodium)

signed recently because of ill health. The school board has named LEIL L. YOUNG, San Mateo school principal, as his successor.

HENRY C. CHALMERS, superintendent of schools, Wildwood, N. J., for thirty-one years, has been succeeded by LANNING MYERS, English teacher in the high school.

GEORGE A. PERSELL, superintendent of schools, Jamestown, N. Y., for the last six years and assistant superintendent for eleven years prior to that, has retired. His resignation has been ac-

cepted and it becomes effective in June.

M. M. GALLAGHER, former principal of the high school at Great Falls, Mont., recently signed a three-year contract as superintendent of schools at Billings, Mont.

ARTHUR BOWIE has been promoted from a principal's post to assistant superintendent of schools in Brooklyn, N. Y., succeeding HUGO NEWMAN, who retired in September.

VAUGHN R. DELONG, superintendent of schools, Ellwood City, Pa., since 1932, has been elected superintendent

of schools at Oil City, Pa., to fill the unexpired term of R. A. BAUM.

JOSEPH A. LEONARD has been named executive head of the public school system at Old Town, Maine.

EDWARD RUSSELL, superintendent of schools, Pittsfield, Mass., recently was the guest of honor at an appreciation banquet attended by 500 citizens of the community. The occasion was an expression of Pittsfield's gratification that Mr. Russell chose to remain as superintendent rather than to accept an appointment as president of the Massachusetts State Teachers College at Westfield.

DR. GERALD D. WHITNEY, former deputy superintendent of the Pennsylvania Department of Public Instruction, has been appointed associate superintendent of schools in Pittsburgh. CLARENCE E. ACKLEY, former director of the bureau of administration and finance, has been promoted to fill Doctor Whitney's position.



The creative work demanded of pupils by the modern educational system calls for a good deal of constructive criticism. Ideal equipment for this purpose is good blackboard—plenty of it. For the generous use of blackboard saves time and effort, not only for teachers but for pupils as well. But (you may ask) how much blackboard is needed?

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Principals

HENRY M. PADDEN, assistant to Dr. HOWARD CONANT, principal of the Holyoke High School, has been appointed principal of the Morgan Junior High School, Holyoke, Mass., to succeed EDWARD J. SCANLON.

W. H. BLACK, principal of Winston County High School, Double Springs, Ala., since 1931, has tendered his resignation. He will be succeeded by JESSE POSY, of Haleyville, Ala.

JOHN S. HARTMAN, history instructor, has been named principal of the Royersford Junior-Senior High School, Spring City, Pa., and assistant to A. J. ENGLISH, supervising principal.

E. W. PAYLOR, for the last several years principal of the Brosville High School, near Danville, Va., has accepted the appointment as superintendent of the Hughes Memorial School located near Danville. This school is an orphanage with more than a million dollar endowment left by the late Colonel Hughes of Danville. Mr. Paylor succeeds L. D. HANDY, who is entering the profession of law.

EDWARD W. COOKE, dismissed as principal of Hornell High School, Hornell, N. Y., last August on charges of incompetency and inefficiency, resumed his duties recently, following a decision by the New York State Department of Education, which reinstated him and ordered his back salary paid.

CARL GALLOWAY has resigned as supervising principal of the public schools at Metuchen, N. J.

JOHN B. CHILSON, who has been principal of schools at Suffern, N. Y., will be retired when his contract expires at the close of this school year.

MURRIE BATES has been appointed principal of Pamplin High School, Pamplin, Va., succeeding MERLE DAVIS, who resigned to accept the appointment as supervisor of schools for Greensville County, Virginia.

In the Colleges

DR. RALPH W. TYLER, professor of education at Ohio State University, has been appointed head of the department of education at the University of Chicago to succeed PROF. CHARLES H. JUDD, whose retirement is effective in June. Doctor Tyler, who received the Ph.D. degree from the University of Chicago, has been research associate of the bureau of educational research at Ohio State University.

DR. WILLIAM ALLAN NEILSON recently announced his plans for retiring as president of Smith College in the summer of 1939. Doctor Neilson celebrated his twentieth anniversary as president of Smith last fall. He is in his sixty-ninth year.

DR. GORDON BARCLAY, acting director of the school of education at the Russell Sage College, Troy, N. Y., has succeeded TRESSA J. MEYER as director of freshmen.

EDWARD J. SCANLON, principal of the Morgan Junior High School, Holyoke, Mass., has been named president of the Westfield State Teachers College by JAMES G. REARDON, Massachusetts state commissioner of education. He began his new duties February 1, succeeding DR. CHARLES A. RUSSELL, who resigned the presidency several weeks ago to become curator of the American Museum of Natural History, New York.

DR. EDMUND D. SOPER recently resigned as president of Ohio Wesleyan University because of illness.

DR. EUGENE S. BRIGGS, president of Christian College, Columbia, Mo., has been named president of Phillips University, Enid, Okla., succeeding DR. I. N. McCASH, who is retiring. The new president is forty-eight years of age. He became president of Christian College in 1935.

WALTER C. PATCHETT, principal of the Santa Rosa High School, Santa Rosa, Calif., has asked the board of education to relieve him of his position so that he may accept the position as dean of the college of agriculture at the San Luis Obispo Polytechnic School.

Deaths

DR. JOHN S. ROBERTS, associate superintendent of schools, New York, died recently after a long illness. Doctor Roberts had been a member of the New York school system for forty-two years and was assigned to the

junior and senior high school division. He was a pioneer in the development of junior high schools.

PROF. COLIN S. BUELL, principal of Williams Memorial Institute, a founder of Connecticut College and secretary of the college's board of trustees, died recently at the age of seventy-seven.

GEORGE EDWARD SCHILLING, principal of Bradford Senior High School, Bradford, Pa., for eighteen years, died recently in the Bradford Hospital.

E. T. GENHEIMER, principal of the Waco High School, Waco, Tex., died

recently after thirty-one years' service in that school. Doctors said his death was due to heart failure.

MRS. MARY CARROLL CRAIG BRADFORD, president of the N. E. A. during 1917 and 1918, and former superintendent of public instruction in Colorado, died on January 15.

DR. JEREMIAH RHODES, superintendent of schools, Pasadena, Calif., from 1911 to 1919, and for the last five years assistant state superintendent of schools in Texas, died recently in a hospital following a gall bladder operation.

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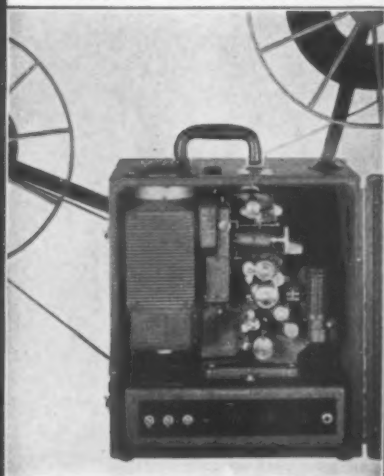
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On the Air During March

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time.

Daily

12:30-1:30 p.m. — National Farm and Home Hour (NBC Blue).¹

Monday

2:30-3:00 p.m. — American School of the Air, Human Relations Forum, to run through May 2, will consist of a round table discussion among fourteen high school pupils of varying social and financial backgrounds; presented in cooperation with the Progressive Education Association's commission on human relations with Dr. Alice Kelleher directing.

5:30-5:45 p.m. — Dorothy Gordon, Children's Corner (CBS).

6:20-6:30 p.m. — "New Horizons," sponsored by the American Museum of Natural History (CBS).

7:00-7:15 p.m. — Music Is My Hobby (NBC Blue).

10:30-11:00 p.m. — National Radio Forum (NBC Blue).

10:30-11:00 p.m. — Brave New World, Latin-American program sponsored by the U. S. Office of Education (CBS).

March 7 — A Caribbean Cruise.

March 14 — Wings Over South America.

March 21 — Down the Pan-American Highway.

March 28 — The Land of Music.

Tuesday

2:00-2:30 p.m. — Fun in Music, band lessons under direction of Dr. Joseph Maddy (NBC Red).

2:30-3:00 p.m. — NBC Music Guild (NBC Blue).

2:30-3:00 p.m. — American School of the Air, American literature alternating with music (CBS).

March 8 — Guillotine, Drum and Bugle.

March 15 — The American Newspaper, John H. Finley.

March 22 — Operatic Debut.

March 29 — American Stories for Youth, Helen Ferris.

4:45-5:00 p.m. — Current Questions Before the House (CBS).

6:00-6:15 p.m. — Science in the News (NBC Red).

6:00-6:30 p.m. — Let's Pretend, a program of fairy stories for children (CBS).

Wednesday

2:00-2:30 p.m. — Your Health, supplementary material for health teaching in junior and senior high schools, sponsored by the American Medical Association (NBC Red).

PUBLIC HEALTH

March 2 — Water, Waste and Sanitation.

March 9 — Protecting Perishable Foods.

March 16 — Keeping Books on Health.

March 23 — Catching Disease from Animals.

HEALTH EDUCATION

March 30 — A Foot for a Day.

2:30-3:00 p.m. — American School of the Air, geography (CBS).

March 2 — Guadalajara and the Ideal Tropics.

March 9 — Nicaragua and the Long-Proposed Canal.

March 16 — Maracaibo and the Venezuelan Oil Fields.

March 23 — Head Hunting Tribes of the Upper Orinoco.

March 30 — Brazilian Rubber Plantations.

4:30-5:00 p.m. — Youth in a Modern Community, sponsored by the radio forum, National Congress of Parents and Teachers (NBC Blue).

March 2 — What About the Movies?

March 9 — Art and Music.

March 16 — A Servant in the House.

March 23 — What Makes It Bounce?

March 30 — Summer Round-Up of the Children.

5:30-5:45 p.m. — Dorothy Gordon, Children's Corner (CBS).

6:00-6:15 p.m. — Our American Schools, sponsored by the N. E. A. to promote teacher welfare and better support for schools (NBC Red).

7:45-8:00 p.m. — Science on the March (NBC Blue).

7:45-8:00 p.m. — Adult Education Program (CBS).

Thursday

2:00-2:30 p.m. — NBC Music Guild (NBC Red).

2:30-3:00 p.m. — American School of the Air, international music programs broadcast by short-wave from European schoolrooms (CBS).

4:00-4:15 p.m. — Science Service Series (CBS).

4:30-5:00 p.m. — Education for Living, sponsored by the General Federation of Women's Clubs (NBC Blue).

6:00-6:30 p.m. — Let's Pretend (CBS).

7:45-8:00 p.m. — Science on the March, under auspices of the American Society for the Advancement of Science (NBC Blue).

9:30-10:30 p.m. — America's Town Meeting of the Air (NBC Blue).

Friday

2:00-3:00 p.m. — Damosch Music Appreciation Hour (NBC Red and Blue).

2:30-3:00 p.m. — American School of the Air, vocational guidance (CBS).

March 4 — Interview With Young Workers in Modern Transportation.

March 11 — Interview With Young Workers in Airplane Services Other Than Pilot.

March 18 — Interview With Boys in Merchant Marine Training.

March 25 — Can Personality Be Put On?

3:00-4:00 p.m. — NBC Radio Guild (NBC Blue).

3:30-3:45 p.m. — Current Questions Before the Senate (CBS).

5:30-5:45 p.m. — Dorothy Gordon, Children's Corner (CBS).

6:00-6:15 p.m. — Education in the News, dramatization of news items in education by the U. S. Office of Education (NBC Red).

Saturday

10:30-10:45 a.m. — The Child Grows Up (NBC Blue).

11:00-11:15 a.m. — Our American Schools, sponsored by the N. E. A. to bring home and school in closer cooperation (NBC Red).

11:00 a.m.-12:00 m. — Young People's Concert, Cincinnati Conservatory of Music alternating with the Symphony Society of New York (CBS).

11:30 a.m.-12:00 m. — Music and American Youth (NBC Red).

5:00-5:30 p.m. — Stories of Industry, sponsored by the U. S. Department of Commerce (CBS).

5:00-6:00 p.m. — Great Plays (NBC Red).

9:30-10:00 p.m. — American Portraits (NBC Red).

10:00-11:30 p.m. — NBC Symphony Orchestra (NBC Red and Blue).

Sunday

12:30-1:00 p.m. — University of Chicago Round Table (NBC Red).

3:00-5:00 p.m. — New York Philharmonic-Symphony Orchestra (CBS).

4:30-5:00 p.m. — The World Is Yours, thrilling adventures in the world of science by the Smithsonian Institution (NBC Red).

March 6 — Men Against Insects.

March 13 — Conquest Underground.

March 20 — Rockets and Planets.

March 27 — Saving the Forests.

¹Except Sunday.

DISASTER

New Building Burns

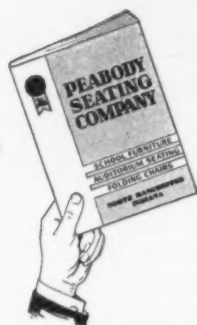
At Cumberland, N. C., a school building which had been in use only four months was destroyed by fire at an estimated loss of \$46,000. The fire, of undetermined origin, left 250 high

school pupils temporarily without school facilities of any kind.

Averts Panic

Forty-two pupils in a country school-house at Plainview, Mo., probably owe their lives to Paul Hale, principal of the school, who discovered a fire in the wooden school building while classes

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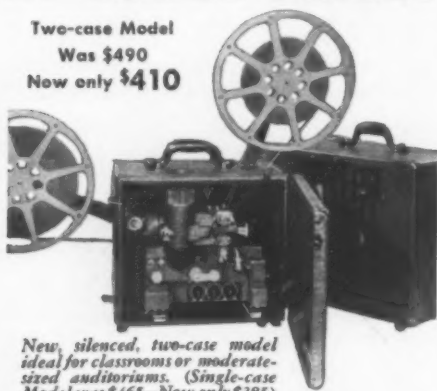
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were in session, rushed to the fire bell, only to find that the flames had burned the rope. The principal then went from room to room, spreading the alarm and cautioning the children to file out in an orderly manner. As a result, there was no panic and no one was injured. Damage was estimated at \$4,000.

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Fire, which followed a mystery explosion, destroyed the five-story structure of the Loretto Convent and Academy at Niagara Falls, Ont., recently. All occupants of the building were safely removed to private homes. Damage was estimated at more than \$1,000,000.

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The visual instruction bureau, an extension service of the University of Texas, estimates it has served more than four million people during the last two years. Attendance at slide exhibitions totaled more than two million, about three-fourths of whom were school children, while at the showings of motion picture films, slightly less than one million were

school children and a little more than a million were persons in community groups.

RADIO

Program Changes

Two new programs are now being heard on the American School of the Air on Mondays and Thursdays. The "Human Relations Forum" on Mondays consists of a round table discussion among fourteen high school pupils of varying social and economic backgrounds. These youngsters, in extemporaneous round tables, will consider problems which intimately concern their lives. Dr. Alice Kelliher of the Progressive Education Association will direct the production, at which young speakers will be free to say whatever they wish on the problem under discussion after a short dramatization outlines the topic.

American grammar school pupils may hear their European contemporaries on Thursday afternoons singing folk songs and sending messages from the other side of the Atlantic in a series of short-wave broadcasts of international music programs. Some of the countries to be visited are Switzerland, Austria, Rumania, Bulgaria, Jugoslavia, Lithuania, Latvia and Estonia.

Films for the School Screen

Physical Geography and Geology

Study of a Mountain Glacier—Chalk talk on the screen by Dr. W. W. Atwood who appears before a blackboard to describe how a glacier begins and grows. Step by step he pictures, in graphic chalk diagrams, snow gathering high among the mountains, its weight causing ice to form, and the moving mass of ice making its slow way down the mountain valley. 14 minutes. 16 and 35 mm., silent. For rent or for purchase. Society for Visual Education, Inc., 327 South LaSalle Street, Chicago.

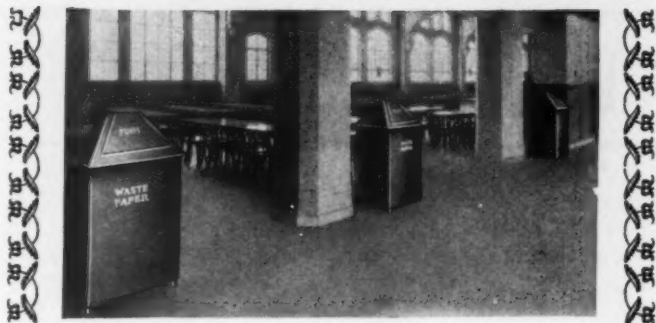
Wearing Away of the Land—Graphically, this film presents another of the basic geologic facts, with scenes taken all over the world, where there were formations which succinctly told a story. 10 minutes. 16 and 35 mm., sound. For rent or for purchase. Harvard Film Service, Cambridge, Mass.

Study of Shore Features—Low Shore—How wave action gradually changes a low shore line from a shore of bays and indentations to one

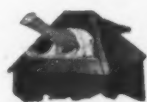
of comparatively smooth lines; work of the sea in building banks, reefs, bars and capes. 1 reel. 16 mm., silent, safety film. For rent or for purchase. Society for Visual Education, Inc., Dept. MPW, 327 South LaSalle Street, Chicago.

Work of the Wind—Wind forming sand dunes, changing shape of canyon walls; enveloping forests, farms, destroying houses; sand shapes formed by wind. The effect of wind on trees and their foliage. 15 minutes. 16 and 35 mm., silent. For rent or for purchase. Films of Commerce Company, Inc., 35 West Forty-Fifth Street, New York.

Mountain Building—By employing animation and models, this film reenacts significant events in geologic history pertaining to mountains and movements of the earth's crust. Supervised by Dr. Carey Croneis of the University of Chicago. 11 minutes. 16 and 35 mm., sound. For rent or for purchase. Erpi Picture Consultants, Inc., 250 West Fifty-Seventh Street, New York.



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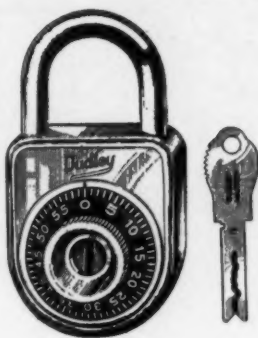
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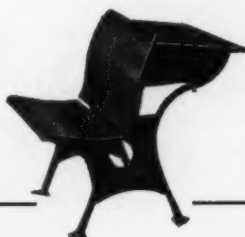
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THE BOOKSHELF

PERSONALITY. A PSYCHOLOGICAL INTERPRETATION. By Gordon W. Allport. New York: Henry Holt and Company, Inc., 1937. Pp. xiv+588. \$3.50. Presentation of the most important researches in this field supplemented by new coordinating concepts to advance study in this extremely rich and varied field.

COMMUNITY BACKGROUNDS OF EDUCATION. By Lloyd Allen Cook. McGraw-Hill Publications in Sociology. New York: McGraw-Hill Book Co., 1938. Pp. xi+397. \$3.

Although devised as a text to give teachers in training a picture of the local environment as a background for teaching, this book may also be read with profit by teachers and administrators in service.

AARON BURR. A Biography. By Nathan Schachner. Illustrated. New York: Frederick A. Stokes Company, 1937. Pp. xii+563. \$3.50.

An unusually complete biography of a much discussed character in American history, written with meticulous care on the basis of exhaustive documentary research.

HOW TO USE PICTORIAL STATISTICS. By Rudolf Modley. New York: Harper and Brothers, 1937. Pp. xviii+170. \$3.

Here is clearly an advance in suggestions for new and more effective use of statistics through symbols, by the man responsible for the pictorial improvement of recent government survey reports. For secondary and college libraries.

MOTION PICTURES IN EDUCATION. A SUMMARY OF THE LITERATURE. Compiled by Edgar Dale, Fannie W. Dunn, Charles F. Hoban Jr., and Etta Schneider Under the Auspices of the Committee on Motion Pictures in Education of the American Council on Education. New York: The H. W. Wilson Company, 1937. Pp. 472. \$2.50.

An unusually complete survey of the literature of motion pictures in education; of real value to principals and teachers; recommended for professional libraries.

SOUND. By Arthur Taber Jones. New York: D. Van Nostrand Company, Inc., 1937. Pp. xii+450. \$3.75.

A textbook on sound as simple as this intricate subject can be made with a minimum of mathematics. Unusually complete treatment designed for college and university students.

OUR CITIES—THEIR RÔLE IN THE NATIONAL ECONOMY. Prepared by the Urbanism Committee to the National Resources Committee. Washington, D. C.: Government Printing Office, 1937. Pp. xvi+88. \$0.50. (Paper Cover.)

One of the best reports yet published by the National Resources Committee in the attempt to interpret the part our cities play in national economy. Legislation to meet these increasing and complicated urban problems is conservatively recommended.

THE COMMUNITY SCHOOL. Edited by Samuel Everett. Published for The Society for Curriculum Study. New York: D. Appleton-Century Company, Inc., 1938. \$2.25.

Deals with all phases of the problem of the community school, its aims, guiding philosophy, techniques and practices, and administration, analyzing a variety of programs that are in operation in different types of communities.

THE PRESENCE OF EVERETT MARSH. By Playsted Wood. Indianapolis: The Bobbs-Merrill Company, 1937. Pp. 387. \$2.50.

Something of the spirit of the public secondary school in the story of a real teacher contrasted with a pedagogic "efficiency boy" afflicted with questionairitis. Worth reading.

JUST OFF THE PRESS

HOME MANAGEMENT. With Special Reference to the College Home Management House. By Irma H. Gross and Mary E. Lewis. New York: F. S. Crofts & Co., 1938. Pp. xi+162. \$1.85.

SUCCESS THROUGH HEALTH. By John Guy Fowlkes, Lora Z. Jackson and Arnold S. Jackson. The Healthy Life Series. Philadelphia: The John C. Winston Company, 1938. Pp. viii+351. \$0.96.

MAKING LIFE HEALTHFUL. By John Guy Fowlkes, Lora Z. Jackson and Arnold S. Jackson. The Healthy Life Series. Philadelphia: The John C. Winston Company, 1938. Pp. viii+400. \$0.96.

OTIS QUICK-SCORING MENTAL ABILITY TESTS: BETA TEST, for Grades 4-9, Forms A and B. Price per Package, \$0.85; Specimen Set, \$0.15. GAMMA TEST, for high schools and colleges, Forms A and B. Price per Package, \$0.90; Specimen Set, \$0.15. Yonkers, N. Y.: World Book Company, 1937.

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HISTORIC CURRENTS IN CHANGING AMERICA. By Harry J. Carman, William G. Kimmel and Mabel G. Walker. Philadelphia: The John C. Winston Company, 1938. Pp. ix + 854. \$2.40.

HOW YOU CAN GET A JOB. By Glenn L. Gardiner. Revised Edition. New York: Harper and Brothers, 1938. Pp. ix + 226. \$1.50.

DURRELL-SULLIVAN READING CAPACITY AND ACHIEVEMENT TESTS. Intermediate Tests for Grades 3-6. By Donald D. Durrell and Helen Blair Sullivan. Yonkers, N. Y.: World Book Company, 1937. \$0.45. (Specimen Set.)

DURRELL ANALYSIS OF READING DIFFICULTY. For Grades 1-6. By Donald D. Durrell. Yonkers, N. Y.: World Book Company, 1937. \$1.65. (Examiner's Kit.)

SOCIAL STUDY IN THE ELEMENTARY SCHOOL. By John Schwarz. New York: Prentice-Hall, Inc., 1938. Pp. xix + 215. \$2.25.

HIGH-SCHOOL STUDENTS TALK IT OVER. By I. Keith Tyler and High-School Students of the University School, Ohio State University. Columbus: Radio Division, Bureau of Educational Research, Ohio State University, 1937. Pp. xi + 55. \$0.25. (Paper Cover.)

OUR COUNTRY AND OUR PEOPLE. An Introduction to American Civilization. By Harold Rugg. The Rugg Social Science Series, Vol. I. Boston: Ginn and Company, 1938. Pp. xiv + 591. \$1.88.

HANDBOOK ON CURRICULUM STUDY. Curriculum Series, Bulletin No. 1. Prepared by the Oregon State Teachers Association in Cooperation With the State Department of Education. Edited by V. D. Bain. Salem: Oregon State Printing Department, 1937. Pp. 186. (Paper Cover.)

RIGHT THINGS TO DO FOR HEALTH AND GROWTH. An Activity Series in Health Instruction. Book One, by Cherrie P. Alexandroff; **Book Two,** by Hedwig Alexander and Cherrie P. Alexandroff; **Book Three,** by Hedwig Alexander. Chicago: A. J. Nyström & Co., 1937. Each Book, 70 pp. \$0.45. (Paper Covers.)

YOUR HEALTH. PUPIL'S WORKBOOK AND GUIDE, 1937-38. Compiled by W. W. Bauer and P. A. Teschner. Richmond, Va.: Johnson Publishing Co., 1937. Pp. 80. \$0.24 (Paper Cover.)

BEST STORIES. By Marjorie Hardy. Chicago: Wheeler Publishing Company, 1937. Pp. 288. \$0.84.

HISTORICAL CHART OF MANKIND: A VISUAL RECORD OF MAN'S RACIAL, NATIONAL, AND CULTURAL PROGRESS. Chicago: The United Educators, Inc., 1937. Distributed by C. S. Hammond & Company, New York. \$1.

NOTES FOR BUYERS

Color Psychology

Throwing spit-balls and erasers has been the favorite intramural sport of generations of small boys and girls. One wonders if perhaps the dinginess of the old-fashioned schoolroom with its scarred buff walls did not stimulate the throwing of these items in a revolt against ugliness.

Now that educators and builders are beginning to see the light and are beautifying schools by means of bright warm colors, mayhap the youthful yen to hurl things will be curbed.

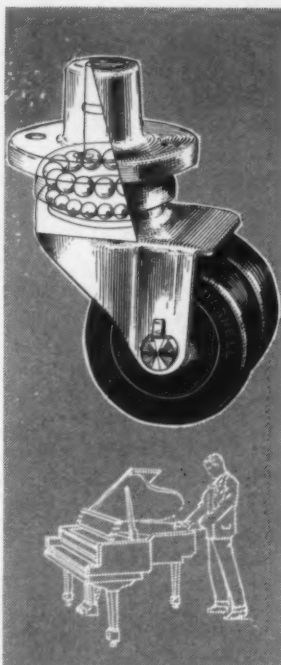
We'll wager that the trend toward color in classrooms has the enthusiastic blessing of paint manufacturers such as the U. S. Gypsum Company, 300 West Adams Street, Chicago, since it constantly preaches the gospel of beauty and cleanliness. U. S. Gypsum, by the way, offers water-thinned paints as a speedy, economical way to achieve both attributes.

Conversation Pieces

If all the chairs in all the schools could talk, they would probably shout with one voice that every institution of higher or lower learning is a school of hard knocks. And, undoubtedly, chairs, particularly the portable variety, do take punishment aplenty by way of the innumerable squirming pupils who occupy them. However, the squirming may be warranted. It's hard to sit still in a chair that hits one in all the wrong places. These two factors seem to put it up to the manufacturers to produce chairs that are comfortable as well as sturdy. It is the claim of the Stewart Iron Works Company of Cincinnati, Ohio, that its metal folding chairs fulfill both of these requirements, and, in addition, may be easily stacked in a comparatively small space when not in use.

Piano Pushing

The school is assembled in the auditorium awaiting, with as nearly hushed expectancy as can be expected from several hundred restless children, the treat that is in store for them. Madame Lalapalooza, the eminent piano virtuoso, has graciously consented to play for the youngsters. The piano is pushed on to the stage, Madame seats herself at the keyboard with a flourish, and everybody settles back for a pleasant hour. Everybody, that is, save the school custodian who gazes sadly at long ugly scars where the piano was shoved across the stage floor. The pleasant job of getting that stage back



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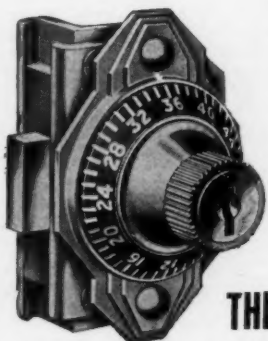
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in shape will be his, and he silently but solemnly vows that he will take up with the superintendent the necessity for fitting the piano with the casters especially built for that purpose. These the Bassick Company, Bridgeport, Conn., is prepared to furnish.

Flood Control

"As unto the ship the hull is, so unto the building is the basement." Excuse us, H. W. L., but the analogy between a ship's hull and a building's basement remains. If the hull of a ship leaks, it is time to man the pumps; similarly, when the basement gets flooded by way of a backed up sewer, a pump is the only solution. Better than being bothered with the unhygienic nuisance of flooded basements, asserts the Imperial Brass Mfg. Company, Chicago, is the installation of sump pump (cellar drainer to you). This completely prevents flooding.

The sump pump is installed under the building; the flood drain in the basement empties into the sump and the water is pumped into the catch basin or sewer. In the Imperial "float-less" pump, the motor is started and stopped by means of electrodes that hang down into the sump. When the level of the water rises in the sump to the height of the upper electrode, an infinitesimal electric current of low voltage flows through the water. This current actuates an electrical relay and the motor starts. When the water has been pumped to below the level of the lower electrode, the contacts in the relay open and the motor stops.

Swing It

If band leaders flatter themselves that "swing" rhythm is original with them, they can just get over it. The rhythm of the swing, without music, is one of the earliest delights of childhood, and many a merry playground battle has been fought over the possession of the swing. Such popularity must be deserved and it is the claim of the Everwear Manufacturing Company, Springfield, Ohio, that the popularity of its particular swing is well deserved by reason of safety and comfort. The seat of the swing has a wooden core covered with air-cushioned rubber of a strength and durability to absorb the shock of a chance blow.

Obvious Distortion

Some people are trouble makers by native bent. Consider Columbus and Magellan as such. Their contemporaries were happy in the certainty that the world was flat, and the map makers of the day could draw pleasant two-

dimensional maps that conformed accurately to the shape of the world as they knew it. These two seafaring gentlemen provokingly proved that the world was round, since which time map makers have had to struggle with the mathematical impossibility of presenting a spherical surface on a single plane with considerable distortion as a result.

This distortion of the map has fostered errors and misconceptions among geography pupils. The desire to eliminate these errors has led to the development by Weber-Costello Company, Chicago Heights, Ill., of the Reality World Maps. In making these Reality maps, Weber-Costello has worked on the theory that to avoid misconceptions arising out of distortion, it is essential that the distortion be obvious, not concealed, and that it be such that the corrective can be readily supplied.

Class Struggle Ends

A grim and anything but silent struggle which has been going on between teachers and custodians for many years has finally come to a peaceful settlement. The cause of the strife has been the insistence of teachers on plenty of fresh air in the classrooms, plus enough heat to offset the chilling effects; whereas, the custodians object to having to "heat the whole outdoors."

Arbitration has been effected by the manufacturers of air conditioning equipment which satisfies both parties. Recently, the Herman Nelson Corporation, Moline, Ill., has announced an air conditioner especially built for schools. This newcomer to the field is, according to the latest literature on the subject, guaranteed to prevent overheating, eliminate drafts and maintain ideal schoolroom air conditions at all times.

Light Out of Darkness

"Johnny, shut the door! Archibald, pull down the shades! Wilhelmina, turn out the lights! School is in session." Thus a modern teacher and her pupils begin a new school day in the dark. How so? Because movies have to be shown in darkness and audio-visual education is becoming more and more important. There's no getting around it, even a threadbare young intellect can grasp ideas, when they are presented by means of movies, that would be meaningless on the written page.

To be most effective as a teaching tool, the projection apparatus behind the motion pictures must be sturdy and reliable. The Bell and Howell Company, 1801 Larchmont Avenue, Chicago, which makes all kinds of motion picture apparatus, modestly but definitely asserts that its product is both.

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“WHY take the hard way?” asks Supt. Worth McClure of Seattle, Wash. He refers to annual reports. Whether to be streamlined or horse-and-buggy is as lively a discussion topic as can be tossed to a flock of school administrators in the year 1938.

The superintendent has to think of both extensive and intensive interpretation, Doctor McClure declares. The former is for the man in the street and the woman at the radio. The latter is useful chiefly to the schools themselves and to the board of education.

In the face of a depression and a recession, some schools have tried shying the annual report at both the extensive and the intensive birds. That's the hard way. In the next issue, Doctor McClure will set forth the simpler attack. We like his division of the subject into annual and living reports.

IN THE spring most anyone's fancy turns to thoughts of sprucing up. School decorating comes largely in the summer holidays, however, and with that fact in mind the editors, moved by spring's impulse and men's needs, have solicited a trio of beauty treatment articles aimed at rejuvenating the school plant. “Accent on Personality,” to appear in May, is written by Mabel Arbuckle, supervisor of art in the Detroit schools. “Pointers on Paint” by H. Estelle Hayden, director of art in the public schools, Des Moines, Iowa, is scheduled for June. In July the superintendent of buildings and grounds for Colorado State College of Education, R. G. Dempsey, will discuss “Painting, Plastering and Patching.” The first two articles combine theory and practice; the third is purely practical.

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JUST about the happiest place in America for a school board member is Emporia, Kan. Des Moines, Iowa, is another fairly comfortable spot. But try being a school board member in Denver or Chicago, and you'll find that the newspapers will ride you on a rail most of the time.

C. R. Foster, assistant professor of education at Rutgers University, has made a five-year study of editorials on education in twenty-five representative newspapers. What he learned about editorial criticism of American school boards will be told in the next issue, when he summarizes his findings for readers of *The NATION'S SCHOOLS*.

THOSE 200 high schools that are the guinea pigs in the Cooperative Study of Secondary School Standards stand to gain weight on the experiment. The nutritive value of the materials developed by the study, however, is not limited to the 200 schools. In the next issue M. L. Alstetter, educational specialist for the study, reports on one phase of it—the status of the curriculum and courses of study: Any school that will devour the material presented can evaluate its own curriculum, determine its weak and strong elements and thus formulate a program for improvement.

"FIRST AID to Furniture," also scheduled for May, deals with repairs and replacements. Ernest O. Fox knows his subject, for he is director of the department of buildings and grounds for the Detroit board of education.

AN ALCOVE is a chummy sort of place, favored alike by extroverts and introverts. Perhaps alcoves are an answer to the huge, noisy, barren school lunchroom perplexity. A New York dietitian, Dorothy E. von Sternberg, thinks so; her point of view will be presented in the school feeding section next month. Alcoves, off cafeteria duty, make good clubrooms.

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LOOKING FORWARD

Child Labor

THE supreme court of Kentucky has rendered a decision that the proposed twenty-second amendment to the United States Constitution, known also as the Child Labor Amendment, which has been pending for thirteen years, is forever dead. In 1926 the Kentucky legislature rejected this proposed amendment as did a total of thirty-six other states over a period of years.

On Jan. 13, 1937, the Kentucky legislature reversed this action and approved it. The case was carried to the supreme court which declared the amendment void on the grounds that it was "no longer legally pending." The secretary of state now has in his possession twenty-one notices of rejection.

As a result of this decision two ways are open for those who desire to eliminate completely as a national policy the exploitation of immature children by industry and trade. The first is the possible reenactment of the assumptively legally dead proposal in the same form as first adopted in 1916. Senator Barkley of Kentucky already has introduced such a resolution. The second possibility is the adoption of the Vandenberg resolution of 1937, which was amended in several respects and has been reported favorably by the judiciary committee of the United States Senate.

The original proposal was opposed by certain religious interests, by farmers and by many other groups that felt it gave to the federal government too great a power over the youth of the country. The Vandenberg proposal met these and other objections by introducing certain modifications that include: the reduction of the age limit from 18 to 16 years; removal of the word "regulate," which would confine federal authority solely to the prohibition and limiting of child labor; addition of the word "for hire," to eliminate any possibility of the prohibition of children working in their own homes or on their own farms; limitation of the period of acceptance to seven years, and ratification by the direct vote of the people expressed through constitutional conventions.

Since Senator Vandenberg's proposed amendment provides for the elimination of child labor and also

reduces the objections and eliminates the fears of those who are dubious of increased federal control over the children of this country, it appears as if this modified proposal might receive favorable attention from the states.

The amended Vandenberg proposal as now before the Senate includes the following three sections:

"Section 1. The Congress shall have power to limit and prohibit the employment for hire of persons under 16 years of age.

"Section 2. The power of the several states is unimpaired by this article except that the operation of state laws shall be suspended to the extent necessary to give effect to legislation enacted by the Congress.

"Section 3. This article shall be inoperative unless it shall have been ratified as an amendment to the constitution by conventions in the several states, as provided in the constitution, within seven years from the date of the submission hereof to the states by the Congress."

Careful study of this proposed amendment is recommended to all professional organizations and to the parent-teacher associations in the several states.

School Radio Possibilities

THE action of the Federal Communications Commission in allotting twenty-five channels on the ultra-high radio waves to nonprofit educational broadcasting is of real significance to the schools of this country.

For the first time the public and voluntary educational institutions are given the opportunity to direct, control and use, without outside interference, a modern means of communication. It will not only make broadcasting possible into the schools at times most convenient to the children, but also will permit the development of general and specialized programs of adult education. Institutional interpretation may be improved at little expense. Commercial policy will cease to dominate and determine educational programs. Station censorship will be abrogated.

Much experimental effort will be required before the full potentialities of this new area are fully realized.

The cost of installing these ultra-high frequency broadcasting stations and studios is estimated to be so reasonable that all city school systems will be able to afford them. The adjustment problem in the receiving instrument is more serious. Here it will be necessary to add another frequency band for reception of these local programs.

Since stations operating on these frequencies are local in character, it is estimated that fifty different stations throughout the country may use the same frequency, thus allowing a total of 1200 possible educational broadcasting stations. Since the effective reception distance is less than fifty miles, it would appear that the demand for local stations by city and county school systems, colleges and universities would be far in excess of 1200. While efforts to secure wider allotments should be encouraged, the possibilities of this first allocation to educational institutions must not be overlooked at the present time.

For Better Organization

TWO movements sponsored by state education associations and now in the development stage deserve a large amount of credit for professional vision and foresight. In Pennsylvania the organized teaching profession is concerned with removal of the appointment of the state superintendent from partisan politics by substituting professional selection by the state council of education with tenure during efficient service. In Michigan the state association is planning by initiatory petition to place an amendment on the ballot which will provide for the selection of the state superintendent of public instruction by an enlarged lay state board of education instead of by party nomination and popular election as has been the practice since 1837.

Even casual analysis of state educational organization is capable of convincing the most confirmed skeptic of the need for general reform in this area. Of the forty-eight state educational officers only eight are now appointed solely for their professional ability by state boards of education, eight are appointed by governors and thirty-two are still chosen by popular vote. The average term of office in these thirty-two states is less than five years. The difficulty of selecting superior professional talent through popular election is apparent. The rapid turnover in this office makes it even more difficult for the chief state school officer to advocate and develop long term policies and plans. As a part of the state political machine, whether elected on partisan ballot or appointed by the governor, his organizational obligations frequently obscure his professional duties. Political expediency determines the selection of personnel. Insecure tenure does not improve professional outlook and too much time is required to maintain political fences. This condition is due to no fault of the individuals involved, but is definitely an outgrowth

of the system to which the individuals must adjust in order to exist.

The programs of the Michigan and Pennsylvania education associations cannot be too highly commended. It is to be hoped that their leadership will soon be followed by similar programs in other states.

Improving Elementary Education

THERE is frequent discussion in professional journals and on institute platforms of ways and means for improving elementary education. Stimulative devices of many types, improved supervisory technics, curricular enrichment, improvement in instructional material and increase in text and library books are among the most frequently mentioned and certainly no one would suggest that any of these areas can be neglected. The obvious fact remains that in the last analysis the improvement of elementary education depends most definitely upon the improvement of the teaching personnel. With the danger of being trite, it still appears necessary to emphasize the fact that the teacher, not the organizational aids, is the most important element in the educational process.

It is also true that the poorest trained segment of the teaching profession may be found in the elementary schools. While reasons for this condition are numerous, the major factors may be considered to include: the traditional attitude of administrators in considering elementary education as much simpler and possibly less important than secondary education; the existence of the small and isolated rural and village district with its restricted financial program and leadership, and the typical position-automatic salary schedule which tends to overemphasize secondary education at the expense of the elementary school.

The superior elementary teacher finds little stimulus toward advanced training in her instructional area. Improvement of financial position may be made only by transfer to either the lower or upper division of the secondary school or through obtaining administrative or supervisory rating.

Elementary education may be most rapidly improved by making provision for major changes in these areas. The community as well as the teaching profession must be actually convinced of the primary importance of the preadolescent years. The second desirable change is the reorganization of marginal school districts into natural communities in thickly settled regions and larger territorial units in more sparsely settled areas. Larger administrative units will permit enrichment of program, better financial support and the obtaining of more effective leadership. The adoption of some form of preparation or single salary schedule will do more to improve elementary teaching personnel within a given period than any amount of preachment or intensification of supervision. It is the most potent

instrument in the self-improvement of personnel in the possession of school districts.

The principle underlying the single salary schedule is functionally sound, since its fundamental thesis is the equality of elementary and secondary education. Instruction in the primary and postprimary school is recognized as of equal value to that in the secondary grades. Capable elementary school teachers operating under this form of schedule no longer find it necessary to seek the secondary area for increased rewards. The single schedule is also self-stimulative in character. It is not necessary to use administrative coercion.

There is one weakness in many current preparation schedules that needs correction. The tendency to give salary increments for two, four, six and eight hours of any type of institutional credit tends to result in emphasis on "credit collection" rather than on a well-balanced program of general and professional educational improvement. It is doubtful whether fiscal rewards should be offered for less than a year of work. Schedule specifications for units of training need to be carefully written and more emphasis placed on a well-balanced program of training.

Russian Education

FOR a number of years following the Russian revolution American schools were deluged by glowing statements from certain educators concerning the progressiveness and efficiency of the soviet schools. It was difficult for the more rationally minded to conceive of democratic perfection on the basis of general organization philosophies and current economic conditions, but logical argument or refutation was difficult, if not impossible. Dialectic is not easy to controvert. In light of these eulogies it is interesting to note what Eugene Lyons, a strong communist sympathizer who spent six years in Moscow as correspondent for the United Press and suffered progressive disillusionment, has to say about the theory and practice of Russian education. In his *Assignment in Utopia* (Harcourt, Brace & Co.) on pages 333-34, he states:

"The panegyrics by educators, Professor Dewey and Professor Counts and a bevy of sub-Deweys and sub-Counts, were of particular interest to those of us who had the problem of educating children in Moscow to solve. Most of these theoreticians of pedagogy recognized instantly that the soviet planners had cribbed some of their favorite ideas, which put them in a highly amenable frame of mind. On paper the soviet educational plans and curriculums combined the best features of Dewey, Dalton, Montessori, *et al.* A few model schools made a brave and usually futile effort to live up to the plans, within the limits of the shortages of paper, pencils, teachers and hygienic facilities. I do not know what methods the specialists from abroad used to investigate soviet education. Presum-

ably, they stocked up on theoretical official plans and brochures and had a glimpse of the model schools.

"Each time I read another hyperbolic report by another well-meaning modern educator, I hastened hopefully to the schools he mentioned or inferred. I discovered that somehow he had failed to look at the toilet; missed the fact that the school had been closed half of the term because of epidemic diseases; forgotten to note that one teacher, badly in need of schooling herself, must supervise sixty or seventy undernourished and excessively mischievous little pupils. The enthusiasm of these educators attested their kind hearts and modernist daring, but their judgments belonged with the effusions of the long line of self-deluded outsiders."

Extent of Federal Aid

IT HAS been estimated by O. L. Harvey, associate specialist in education, that the federal government has expended or authorized for expenditure during the five-year period for aid to public education a gross sum of more than one and one-half billion dollars, or an average of three hundred million dollars annually. Owing to departmental placement and methods of bookkeeping which do not easily permit an accurate breakdown, it is possible that this estimated sum may have been greatly exceeded in actual fact. Approximately one-sixth of this amount, or two hundred fifty million dollars, has been administered through the regular agencies, the Department of Agriculture and the Department of the Interior, while the remainder has been expended by emergency agencies.

The Public Works Administration during the three years, ending December 1937, granted \$267,700,000 for buildings and lent another \$85,000,000, providing a total for capital improvement of \$352,700,000, or an average of slightly more than one hundred million dollars per year. Works Progress Administration has provided a total for both current activity and capital improvement of \$472,000,000, of which \$266,000,000 has been used for the improvement of existing plants and the erection of new units. National Youth Administration's contribution totals \$167,100,000, and Civilian Conservation Corps for three years totaled \$347,700,000.

It is unfortunate that federal accounting methods do not provide easier means for presenting regularly the total contributions to education by the federal government. The teaching profession, misled by adverse propaganda promulgated by certain interest-groups, has been prone to criticize the present administration for lack of interest in the plight of the schools. In light of these conservatively presented expenditures, this position appears to be a difficult one to sustain.

The Editor

Camps of Fifty Years Ago

HERBERT H. TWINING

TO DESCRIBE the possibilities of camping as an educational agency would be essentially to enumerate the best of educational opportunities that the community offers. Charles W. Eliot, late president of Harvard University, stated that "the organized summer camp is the most important step in education that America has given the world." The value of camping has also been recognized by such eminent educators as William H. Kilpatrick, John W. Studebaker and John Dewey.

If the great opportunity of camping is really to be attained for the children of America, development of proper leadership and elevation of practices in camping are essential. This is definitely involved in the thinking of camp leaders in America.



This scene suggests the Spanish-American War and the Rough Riders, but no—it is a group of campers at old Camp Dudley in 1896. Below is a scene at the same camp two years earlier. Organized first for a group of boys, Camp Dudley later came under the sponsorship of the Y.M.C.A. It had a colorful history.



Photographs by
H. C. Beckman
of New York

Two reasons why camping may attain such heights may be stated: (1) the best of present day practices are available to camping because of the absence of formalities associated with traditional education, and (2) education in camping is an immediately practical education. Educators realize the value in close association between the learning of skills and their immediate application. These two factors are seldom found in other educational situations.

A brief historical résumé of the early years of organized camping will reveal the fact that the pioneers in the field were cognizant of the potentialities of the camp as an educational agency. Nearly forty years before the turn of the present century, the first organized camp for boys came into being.

This camp was founded in 1861 by Frederick William Gunn, headmaster of the Gunnery School in Washington, Conn., which was in the early days called "A Home School for Boys." Prior to 1861, Mr. Gunn and his wife took the boys of their school on short camping trips that

proved so interesting and valuable that they decided to establish a permanent camp in which they might stay for an extended period during the summer months.

During the early years of Gunnery the school year was divided into two parts, a summer term from the middle of May to the end of September, and a winter term from the middle of November to the end of March. This school was one of the last to adopt the long summer vacation, and this change eliminated the summer camp. Thus the first organized camp was a definite part of the school régime and not organized as most camps are today to solve the problem of summer vacation leisure time.

Dr. Joseph Trimble Rothrock, a practicing physician of Wilkes-Barre, Pa., established the first private camp in 1876. Doctor Rothrock states: "In 1876 I had the happy idea of taking weakly boys in the summer out into camp life in the woods, and under competent instruction, mingling exercises and study, so that pursuit of health could be combined with acquisition of practical knowledge outside the usual academic lines."

The first church camp on record was established in 1880 by Rev. George W. Hinckley, pastor of a church in West Hartford, Conn. The Rev. Mr. Hinckley took the

These swimming suits were considered pretty daring in 1897 and probably were not expected to be viewed by feminine eyes. Except for their suits, hair cuts and bad posture, they might be a modern group of boy campers with a camp counselor.



Leading the life of Reilly. In 1897 fond mothers were frankly dubious about the wisdom of permitting their boys to live out in the open week after week.



This view of Camp Dudley as it appeared in 1903 is proof that informality continued to be the keynote of camp life. No attempt had then been made to lay out the camp on orderly lines.

boys of his parish on a trip and established camp on Gardner's Island, Wakefield, R. I. Later he located his Good Will Camp at Hinckley, Me., where he had founded the Good Will Farm for Boys, which has become a famous institution. The program of the Good Will Camp consisted of religious periods, educational studies, swimming and athletics, and sings, and entertainment in the evening.

Ernest B. Balch established Camp Chocorua in 1881. Accounts of the work of Mr. Balch reveal that he recognized special educational needs on the part of the campers and planned the program to meet them. Many of the principles that govern

the well-organized camps of today were practiced at Camp Chocorua.

Mr. Balch first conceived the idea of a boys' camp in 1880 when he wrote: "The miserable condition of boys belonging to well-to-do families in summer hotels, considered from the point of view of their right development, set me to looking for a substitute. In 1881 I had thought out the main lines of a boys' camp. That year with two boys, Henry Blair and my brother, Stephen Elliott Balch, I made a short camping trip to Big Asquam, Holderness, N. H.

In June 1881, we discovered and landed on Burnt Island, a perfect island for a boys' camp, where we calmly built our first building—Old '81—under the impression that nobody owned the island. A visit from the scandalized owner developed into a deal by which I bought the island for \$40.¹

"Camp Chocorua continued until 1889 and was a camp in which boys could have outdoor sports, a reasonable amount of work and opportunity to enjoy themselves in their own way. Starting with five boys and a

small frame shanty in 1881, it grew into one of the oddest institutions that may be imagined. . . . Its great success was due to the fact that it was modeled on real life as men see it.

"The motive underlying all of its pleasant features and most quaint customs was twofold: (1) responsibility, personally and for others and, (2) work, not only the work which each one must do for himself, but also that extra work which brings with it a tangible reward. The boys were encouraged in everything that would tend to develop them physically, to make them strong and healthy, but they also found themselves members of a little world that had a high standard of honor, a world in which the laws governing the conflicting interests of men were recognized and obeyed."²

A good summary of the philosophy of Camp Chocorua is stated in the following quotation from Gibson: "Statements regarding the Balch camp reveal the fact that creative camping, the spiritualization and division of work, achievement tests, group responsibility and trained leadership had their origin fifty years ago in this remarkable 'Boys' Paradise,' and are therefore not so recent as many camp directors imagine. A wise man of long ago said, 'There is nothing new under the sun,' and history seems to verify this statement."

In 1882 Camp Harvard was established by William Ford Nichols, who was a student at Cambridge Theological Seminary. The camp had similar objectives to those of Camp Chocorua.

Later, in 1886, Dr. Edwin DeMerritte founded Camp Algonquin, which continued for forty years under his directorship. Gibson says: "Doctor DeMerritte established high standards in nature appreciation and Camp Algonquin was characterized by its emphasis upon the study of nature. . . . He said, 'A camp should be educational, not only in the development of character, but also in a close study of all that God created for our enjoyment.'"



A sledge, often hired from the village livery stable, transported the boys from train to camp and also brought to camp the occasional visitor. The trip to camp often was a matter of hours over bad roads and across cow pastures.



And what is this? Boy campers with mustaches? No, indeed, this is a group of the older young men of the Y.M.C.A., feeling very devilish at posing in their camping togs. Manly sports have not caused their biceps to bulge.

¹Gibson, H. W.: History of Organized Camping, The Camping Magazine, Feb., 1936.

²A Boys' Republic: The Story of Camp Chocorua, McClure's Magazine, Aug., 1893.

From 1882, the date of the establishment of Camp Harvard, camps of various types grew in numbers, and naturally varied greatly in their objectives and ideals as set forth in their programs. In 1885, Sumner F. Dudley, a young business man, organized a camping trip for some boys who belonged to the Y.M.C.A. Mr. Dudley took these trips each summer, and they were so successful and considered so worth while that in 1891 a friend of Mr. Dudley's offered him the use of part of his land and it was on this land that Camp Dudley was permanently established. It was this camping experience that decided Mr. Dudley to give up business and become connected with the Y.M.C.A.

Not until after 1890 did the organized camping idea catch the imagination of other associations and organizations working with youth. Soon the Boys' Clubs, Boy Scouts, Girl Scouts and various groups interested in underprivileged children had started their camps. After the turn of the present century the number of camps increased rapidly, until today many different types of camps are represented in the camping movement, varying with the different organizations and individuals sponsoring them.

"The early camps were built around contagious personality rather than around expensive equipment, and as one reads of the aims and ideals which motivated these pioneers one realizes what a rich inheritance has been handed down to their successors!"

The aims and ideals of these camps of fifty years ago, according to H. W. Gibson in his "History of Organized Camping," may be summarized as follows:

1. To restore those values of life that come from living in the great outdoors.
2. To find joy in the simplicity of living.
3. To develop a love of nature and a study of all that God created for our enjoyment.
4. To play the game for the fun of playing and not for awards given or public recognition.
5. To rationalize the recreative impulse so that it may be a carry-over into later life.



These boys made old Camp Dudley a lively spot in 1897. Organized around a dominant personality, the camp was short on equipment but long on activities to build character, to study nature and to combine work with play.



Second season campers in 1886. Evidently variety in entertainment was permitted, since almost every boy is carrying equipment for his favorite sport.

6. To enrich life through healthful and simple pleasures.

7. To expose boys to the sound principle of work being the law of life and the love of work being the joy of life.

8. To invest boys with responsibility, personally, for others and with others.

9. To show boys that honor cannot be bought but must be won; that manliness, justice, truth, conscientiousness have their own reward.

10. To reach boys through teaching; to mold them into men of stamina and character; to create in them a definite aim in life; to give them a conception of their Maker through an understanding of nature.

11. To lay foundations for loyalty,

integrity and respect for the right of others.

It is obvious that the earlier camps were intended primarily for boys. However, it is justifiable in view of the great expansion of the camping movement in the twentieth century to include girls, women and men in the foregoing statements of aims and ideals prepared for the early camps.

Methods in camping have changed, but the principles established by these pioneer camps are practically the same today. The cornerstones for a sound present day philosophy of camping may be found through a careful study of the programs of these early camps, and more especially through a study of the personalities responsible for them.

Wisdom Sent by Short Wave

HARRY A. JAGER

"TO BE licensed to organized nonprofit educational agencies for . . . transmitting programs to specific schools . . . for routine and administrative material . . . and educational and entertainment programs to the general public."

In these formal phrases the Federal Communications Commission

New ultra-high radio frequencies assigned to the schools are for local use. Practical questions regarding transmitting and receiving are answered by a consultant in the United States Office of Education

on Jan. 26, 1938, announced the assignment of twenty-five ultra-high frequency radio channels for educational use. Behind this announcement lies the drama of long effort.

In June 1936, Dr. John W. Studebaker, U. S. commissioner of education, at a hearing before the Federal Communications Commission, said: "I should be lacking in foresight and negligent of my duty if I did not point out the incalculable value to education in . . . the use of ultra-high radio frequencies . . . in putting at the disposal of education for its vital purposes, mass communication, which will do for education and for democracy what mass communication has done for business."

What are the characteristics of these radio waves? They are in the 41,000 to 42,000 kilocycle frequency, well above the general limit of short wave broadcasting. They are unusually free from the static interference that annoys standard broadcasting and will be entirely free from interference by other stations. They are local in range; that is, they can effectively serve areas with a radius of from two to fifteen miles, according to power and local conditions. This very limitation will recommend them to those who desire to see local school government free to advance under its own leadership.

These ultra-high frequencies supplement, and do not replace, any present use of standard broadcast stations for educational purposes. Institutions using such stations to cover a whole state or the nation may continue to desire and expect the co-operation of their local commercial stations.

In the high frequency band, international high frequencies retain their position as the channels for necessary, and, it is hoped, increasing communication between this nation and its sister republics in this hemisphere as well as the other nations of the earth. But the new allocations furnish nerves and ganglia for the local community. They enable the town, city or county, through its collective intelligence represented by its own chosen agents, to communicate to every part of the body politic in school and home a directed effort for coordinated democratic progress.

What practical questions can be answered? Transmitting equipment is readily available. The engineering problems will vary for each community but are no different from problems already solved successfully in many communities in such matters as police short wave.

Receiving equipment is not now generally on the market, but not because it presents either technical or manufacturing difficulties so much as because of the previous lack of

popular demand. Fortunately, the expected rapid development in ultra-high frequency commercial broadcasting and other impending events in radio will stimulate the marketing of ultra-high frequency receivers at popular prices. Educational radio, then, will have the benefit of these results. Receiving systems now in schools may be adapted to the new frequencies. It is even possible that successful and relatively cheap adapters may be on the market for attachment to present home radio sets.

Costs will vary according to local conditions and the areas to be covered. The indications are that the expense will be surprisingly reasonable; that broadcasting and receiving equipment to serve entire school systems can be installed complete at a capital investment no larger than the charge for constructing from one to three schoolroom units, or for taking care of from 25 to 100 additional pupils in the school system.

The insignificance of these costs when compared with the immense extension of the administrative, supervisory, instructional and cultural resources of a school system is apparent. When, in addition, we consider the priceless advantage not merely of projecting these resources into the homes of the community but also of enlisting these homes behind professional policy with resultant public support, the facilities would be cheap at any price.

Maintenance of a school station and its technical direction may likewise cost no more than the upkeep and instruction of the school units already mentioned. In most cases some unit in the school plant may be utilized for studio and transmitting headquarters.

Many readers will doubtless feel the need for more specific treatment of the problems of equipment, maintenance, production and the costs involved. To answer the more fundamental of these questions the U. S. Office of Education is at present preparing a bulletin based upon competent engineering advice, which will be checked by the engineering division of the Federal Communications Commission and which will serve as a guide for officials or school boards who may consider applying for one of the new frequencies.

A medieval village complete with half-timbered houses, tournament field, castle, moat, drawbridge and even a Gothic cathedral was built by this fifth grade class in a Virginia school.



The whole project cost nothing at all and was made by the children, who outstripped the teacher in seeing possibilities in pasteboard and cellophane.

ELIZABETH R. BALMER

A MEDIEVAL project enchants fifth grade children for it bridges the borderline age between the world of fairy fantasy and the world of reality.

For this reason, at the beginning of the course in fifth grade history at the Foxcroft School, Middleburg, Va., magazine pictures of castles were brought to the classroom and pinned up on the wall for exhibition. At the same time two or three chapters of "Men of Iron" were read aloud daily, and the children drew exteriors and interiors of castles to illustrate the story. Myles Falworth became one of them very quickly, for he is one of the best loved of all fiction children.

In illustrating this story a natural search for details of castle construction and interior furnishings followed. Encyclopedias, books on

Fifth-Grade Fantasy

knighthood, such as "When Knights Were Bold" and illustrated editions of the Arthurian legend, were in rapid circulation. A shelf containing books that were found to be best for details was set aside and some of the children took over the responsibility, that they suggested themselves, of marking with slips of paper the pictures in books which would be most valuable for reference. Two class periods were devoted entirely to the investigation of the mysteries of indexes and references.

As the story of "Myles" progressed (the children always referred to the

book under that title), tournaments became vital, and a study of them led to a study of armor and simple heraldry. Armored knights with shields made a fascinating unit. The day "Myles" was finished the children were so absorbed in the ending that they sat like little ramrods in their chairs, and had to be sent outside to run around "the circle" (the grass plot in front of the school) for relaxation before their next class!

Their individual reading during this first unit of work was simplified versions of half-real, half-make-believe world of knighthood. "Una and the Red Cross Knight" and some of

the King Arthur stories familiarized them with famous names in literature and the whole idea of chivalry.

A query arose in class one day as to why the Middle Ages were thus called. A discussion about dates and centuries followed. Beginning with 1936, by writing the figures on the blackboard, the dates for each century were traced. They were then labeled from the first century to the twentieth century, to eliminate confusion about the fifteenth century being the 1400's and similar "brow-wrinklers." Their finding that the centuries from 1200 to 1600 were approximately "in the middle," unified the dates in the children's minds. The question "Why are we studying the Middle Ages?" is likely to be asked and should receive an adequate answer and perhaps discussion. It was about this time, after we had been reading from "The Boy Through the Ages," that Kenneth, a future hefty halfback, breathed a long sigh and said, "Gee, I wish I could have lived in every age." Thus does historical perspective begin!

The next unit was monastery life. "Gabriel and the Hour Book" was the reader in use. The fifths happened to need an extra amount of practice, and since Evaleen Stein's books make most absorbing reading, they were added. Junior dictionaries were kept at hand and used frequently as the teacher and pupils read together. The children's drawings of this period were of cloisters, monks making books and monastery plans. It is curious that in connection with the cloisters pupils begin to try for perspective and angles in their drawing, which leads to interesting experiments. Old linen was snipped up and boiled for days and pressed into rough paper.

13th Century Cloister Visited

Finally, an excursion was made to the Toledo Art Museum to visit the thirteenth century cloister which has been transported from France and set up there. The pupils also looked carefully at a few fine examples of illuminated manuscripts. Upon their return the children made some "illuminated" initial letters of their own that showed they hadn't missed a detail of those quaint fantasies of cloistered minds.

From monasteries the work branched into cathedrals. From "All the Ways of Building" a graphic description of cathedral construction was read aloud and followed by a study of stained glass window making. Each of the children wrote about watching part of a cathedral being built, as if he were a child in a medieval town. These turned out to be so vivid that when they were read them in class, Priscilla said, "Let's make a medieval village of our own!" "Yes, let's," the others echoed, and thus began the Work of the Ages, the medieval village of the fifth grade.

As half-timbered houses appeared miraculously from shoe boxes, and a suit box, plus oatmeal cartons, turned into a stone castle with four tall towers, the whole school acquired the habit of dropping in to see the latest developments.

Gothic Cathedral Arises

A castellated wall was set up around it, a tournament field laid out below the castle embankment and moat, and a drawbridge was erected. Finally a cathedral began to arise, complete with arched stained glass windows and a rose window over the porch, of vari-colored bits of cellophane pasted together with black strips in carefully worked out designs. The whole thing cost nothing at all and was made entirely by the children, who were infinitely more ingenious than I, and far outstripped me in seeing the possibilities in pasteboard boxes.

The cathedral measured about 3 feet in length and its two towers stood about 2 feet high. Tempera paint was used and the bright-colored houses with dark brown "timbers" were set off by the dull gray of the cathedral and castle and the bold black outlines of stones. The climax came at Christmas time. The village was wired with Christmas tree lights inside the houses, and a big bulb inside the cathedral which illuminated its windows in a dramatically realistic way. The children actually lived in that village, so real did it become to them.

After Christmas as the pupils were reading about the Crusades, each of them wrote a letter to his imaginary home as if he were on the Chil-

dren's Crusade with young Stephen of Cloyes. Next they made a series of large poster pictures to illustrate the story, with explanations printed under each one: "Stephen of Cloyes sees a vision; Stephen preaches to the children; the children march to Marseilles." The Crusades and the beginnings of printing, for which some of "The Story of Books" by Marjorie Maxwell were used, led to the study of the spread of learning and the opening up of the world. The exploration and discovery period made a good basis for world geography and map work.

The dramatic urge struck hard and the children transported themselves to Sherwood Forest so convincingly that two performances of a Robin Hood play were given for their parents. Through the rich legend heritage from the medieval period, the pupils found by themselves the link between their own child-wise fancy and the discerning imagination of a remote age.

What Was Gained?

The question naturally follows, what have the children learned in their year's work? On the side of skills, they have learned to write a neat, legible paper, with simple words correctly spelled and simple punctuation, in properly constructed sentences. They can read books of their level aloud smoothly and with expression, and to themselves with sustained interest. They can use reference material correctly, and they do it voluntarily. On the information side, they have a unified idea of characteristic phases of one of the most colorful parts of our historical heritage and are familiar with some of our richest treasures of literature.

Creatively, they have been able to interpret what they see imaginatively into graphic form and have brought imaginary situations into reality by acting and creative writing. Socially, they have done a closely-knit piece of cooperation in making the village and other minor projects. On the side of attitudes, they have gained an appreciation of the craftsmanship and artistry of Gothic, and they have figuratively been tramping over Europe in days when national frontiers were not the division lines of feeling.

Pontiac Fixes Salaries

JAMES H. HARRIS

FOR at least two years prior to 1936, it was the policy in the schools of Pontiac, Mich., to invite a committee representing the classroom teachers to meet in conference with the superintendent and the board of education, when the time rolled around for establishing a salary program for the ensuing year.

During the years of the depression, the old salary had practically disintegrated, and the only thing the board of education could do was to distribute the amount available for teachers' salaries as fairly and equitably as conditions permitted. To avoid misunderstanding and friction, it seemed the wise thing to confide in the teachers, lay all the cards on the table and ask them to help solve the problem. This policy resulted in establishing a spirit of good will and harmony which, during the trying days of 1932 and 1933, had been somewhat shaken.

Gaining Confidence

In the late fall of 1936, looking forward to the salary program for the year 1937-38 and a possible revision of the salary schedule, a further step toward cementing harmonious relations in the school system and strengthening confidence was taken in the selection of an adviser or consultant to work on the general problem of the salary situation in Pontiac, and to establish the working principles of a new schedule. The consultant was to cooperate with a general committee consisting of four members of the board of education, five members from the classroom teachers' organization and the superintendent of schools.

A member of the faculty of the University of Michigan, acceptable to both the board and the teachers, was employed as technical consultant. The joint committee and the consultant began work in December 1936 and held many meetings between that time and April 1937. The prob-

Superintendent and board of education, faced with the problem of equal distribution of teachers' salaries, have mapped out a new salary schedule with the assistance of a consultant and representatives of the teachers themselves

lems confronting the group were numerous, and in many respects complicated, but they were all approached in a spirit of candor and fair play, and the best of feeling was maintained throughout the entire series of conferences. The studies of the committee and its findings were finally incorporated in a report and adopted by the committee in June 1937, and it is this report that we shall endeavor to summarize briefly.

The report is divided into seven chapters with appendices covering six points. As the report is a volume of fifty-one typewritten pages, only the high spots have been selected, with a view to emphasizing those features that may be of general interest and application.

Recognizing the fact that the position-automatic type of salary schedule is by far the most widely used, the report indicated that the movement toward higher preparatory requirements for teaching, especially in the elementary grades, implies a trend toward uniformity of salaries, both as to minimums and maximums, irrespective of the particular position in the staff line. Pontiac has, from the beginning of schedule making, had a position-automatic schedule, and the report recognizes the difficulties involved in shifting to the preparation-automatic, but recommends that the

principle of the latter schedule be accepted, with the understanding that the transition from one to the other may cover a period of years.

Some of the factors involved in salary schedules are as follows: (1) an adequate professional living salary for the beginning teacher; (2) differential salaries for different types of preparation; (3) annual increases during the period of increase in efficiency due to experience; (4) suitable rewards for service superior to that rendered by the average of the group; (5) stimulus to increases in teaching efficiency; (6) normal competition with related areas, and (7) ability of the community to pay for services.

The report comments on the problem of adequate professional salary as follows:

"From the standpoint of the community, salary should not only be a reward for service rendered, but must also provide an element which will make even more efficient service possible. Efficiency depends on (a) security in the job; (b) freedom from worry; (c) leisure for study and recreation, and (d) the maintenance of a living standard compatible with the social and professional demands of the work."

Should Maintain Standard

The report points out that the salaries for beginning teachers should include not only recognition of the primary wants of food, shelter, clothing, medical care and transportation on a professional standard of living, but also sufficient margin for rational recreation and study, and a margin for savings.

As to the factors, "normal competition" and "community ability to pay," the report recognizes that salary schedules, despite theories and ideals, must be affected by salaries paid in other communities, particularly in the same general area, and by the ability of the community to pay for the desired services. Again, "the basic salary for any community will tend to be somewhere between

the actual value of a teacher's service, conditioned by the law of supply and demand, and the community's evaluation of such service and its ability to pay."

As will be seen when the proposed schedule for Pontiac is presented, the question of the community's ability to pay presents a serious obstacle to its immediate adoption.

The competitive basis on which Pontiac's salary schedule was judged is that known as the Detroit metropolitan area, and for the purposes of the report Detroit and eight sur-

in terms of the relationship of teachers' salaries to labor wages."

Careful study was made of wages paid in Pontiac in January 1937. Ten employers of unskilled labor gave the hourly and weekly wage ranges for unskilled labor, and from these a conservative average annual wage was computed. The weekly average was \$24 and the annual average was computed at \$1000. Seventeen types of skilled labor were investigated and the annual average was estimated at approximately \$1800.

On the basis of this study \$1500

dollar is spent; (2) Pontiac's educational needs; (3) probable educational expenditures; (4) probable revenue, and (5) an estimate of Pontiac's current financial ability.

Under the restrictions imposed by the 15-mill tax limitation amendment, Pontiac cannot meet the demands made by the present schedule, much less those made by the proposed increased schedule. The report, therefore, approved the effort already set in motion by the board of education to attempt by a vote of the people to increase for a period of five years the millage allotted to the schools. This proposal was defeated, and the inauguration of the recommended schedule must await a more favorable turn of events.

Reports Pressing Needs

As to the things that need to be done, the report enumerates the following as most pressing: (1) restoration of teachers' salaries to the pre-depression standard; (2) provision for general growth resulting from the steadily increasing enrollment of children in the schools (averaging 250 per year for the last six years), and (3) provision for the restoration of services curtailed during the depression and the creation of new and desirable services not now possible because of limited revenue.

The report may be summarized in an educational philosophy that places instruction and personnel before equipment. "Tools and shelter are essential, but superior qualities in these facilitating agencies cannot make up for personnel deficiencies."

While the report of the committee may not be immediately adopted, the salary committee and the board of education united in approving its fundamental principles and findings and have adopted it as a report to be "progressively applied as time and circumstances permit." It will prove an invaluable guide when the financial skies in Pontiac brighten and when the possibility of putting its recommendations into effect becomes a reality and not a mere hope.

The Pontiac board of education and the teachers in the system believe that a definite program of salary procedure has been established although its adoption and use must be deferred.

Desirable Preparation — Automatic Increase Schedule

Years of Service	Preparation Beyond High School		
	Less Than Four Years	Four Years Including Earned B.A.	Five Years Including Earned M.A.
	(1)	(2)	(3)
0	\$1500	\$1700	\$1800
1	1500	1700	1800
2	1500	1700	1800
3	1600	1800	1900
4	1700	1900	2000
5	1800	2000	2100
6	1900	2100	2200
7	2000	2200	2300
8	2100	2300	2400
9	2200	2400	2600
10		2600	2800
11		2800	3000
12		3000	3200

rounding cities are included — Hamtramck, Highland Park, Grosse Pointe, Dearborn, Royal Oak, Ferndale, Wyandotte and Pontiac. In the composite ranking, Pontiac is seventh. Pontiac is the only one of this group that has voted itself under what is known in Michigan as the 15-mill tax limitation amendment, and this has affected seriously its ability to pay.

Under this topic the principle and the method of determining desirable minimums and maximums for Pontiac are discussed. "Desirable minimums and maximums," the report notes, "for teachers' salary schedules may be determined by comparison with other area practices, deductions made from actual cost of professional living studies, and from known relationships of teachers' salaries to wages paid skilled and unskilled labor. The method used to determine desirable minimums and maximums in this study for Pontiac was made

was considered a desirable minimum for teachers with two years of professional training, and \$1700 for teachers with four years of such training. The automatic maximum for teachers of two years' training was placed at \$2200, and for four years at \$3000.

On the basis of these preliminary discussions and data, the schedule recommended for Pontiac is of the preparation-automatic type and is as illustrated in the accompanying table.

The adoption and use of the proposed preparation-automatic schedule hinge upon the ability of the city of Pontiac to pay the amount required to meet it.

"Financial ability," says the report, "must be considered in terms of the totality of commitments, both current and future, and the possibility of revenue to satisfy these demands." The problem is discussed under five heads: (1) how the Pontiac school

The group guidance program at San Bernardino Senior High School, San Bernardino, Calif., consists of one-semester orientation classes for sophomores, followed by vocational counseling for juniors and seniors and personal interviews.

THE homeroom system, used so widely to solve the guidance problem, during the past decade, has broken down. In fact, it never was effective except in isolated cases in which individual teachers appreciated the problem and tried to solve it along with their many other duties.

The theory behind the movement was sound, but it fell down in actual practice for several reasons. In the first place, teachers were trained in certain academic fields that claimed their major interest and enthusiasm. In their fields these academically trained teachers have always done efficient "counseling." However, it was another type of counseling that the homeroom was set up to do.

In the second place, the homeroom was extracurricular and this hampered its work; it was just one more thing to be carried on. The procedures used by many were merely of a stop-gap nature: the reading of fiction from magazines or haranguing the boys about the homeroom basketball team or, easier yet, just conducting it as study hall.

Yet, the homeroom was justified on broad educational grounds while obviously it was being maintained as an administrative convenience for the reading of bulletins, organization of intramural athletics, registration activities, student elections and the like. While all of these are important functions, the homeroom as it has been constituted has not performed them in a satisfactory manner. The guidance, which was its supposedly prime function, has been conspicuous principally by its absence.

Before presenting the form of guidance which, in my belief, should



Group Counseling

JOHN H. MILOR

supersede the homeroom, let us inquire into the nature of guidance and of our problem.

It is now accepted as a truism that education is guidance and that guidance is education. If we apply this dictum, everything that is done in a school to meet real needs is guidance and every teacher is a counselor. The widely discussed core curriculum undoubtedly is based on this idea of guidance; everything in the school is integrated into a guidance program.

While we have no fault to find with this broad interpretation of guidance—we need always to keep the unified nature of education in mind—any broad division of human activity, however integrated it may

be in its essential nature, has its subdivisions as a matter of convenience in dealing with it. Therefore, there is a phase of this broad field of education that may be called specialized guidance, or guidance in particular matters that otherwise would be neglected. It is the duty of the professional counselor to attend to these things.

In many schools counselors have been appointed who do not teach but who have a rather large number of pupils under their supervision. These pupils are called to the counselor's office from time to time for personal interviews. I recently asked a boy coming from such a school how often he had met his counselor the preceding semester. He said he

had seen him once for ten minutes. It is the infrequency of contact with pupils that is the great weakness of the office counselor system.

To meet this criticism and to do many more things than the office counselor can do, group guidance has been instituted in San Bernardino Senior High School, San Bernardino, Calif. The counselor meets the incoming sophomores for one semester in classes in "orientation" for which regular graduation credit is given.

A large amount of the guidance given to these pupils is more efficiently given in groups than personally. Furthermore, the counselor in one semester learns to know his pupils well and the pupils also learn to know him just as well. A condition of rapport is established that is of value in all of the personal counseling to follow.

Qualifications of a Counselor

This type of program calls for a counselor with broad training and sympathies. While it is important that he know thoroughly the techniques of his job, it is more important that he be acquainted with the humanities and have a broad philosophy of life. It is essential that he be well grounded in general and abnormal psychology and that he know considerable of the practices of psychological clinics. A knowledge of sociology also furnishes him with helpful background for his work.

This job requires a person who is not subject matter minded, but who, first and foremost, can develop a genuine interest in every boy and girl under his charge. His views on life must be definite and constructive, but at the same time he must possess a tolerance of adolescent enthusiasms and minor indiscretions and must not be easily shocked.

As a classroom teacher he must be a good disciplinarian, but not a militarist, a spy or a snooper. He must possess a personality to which young people react positively.

The work of the guidance department covers the following main divisions: (1) group guidance; (2) registration activities; (3) vocational guidance; (4) personality adjustment, and (5) personal interviews.

The group guidance is carried on

in first semester sophomore classes. Groups are generally divided between those who intend to pursue their education on collegiate levels and those who expect to terminate their formal education with high school graduation. In a rough way, grouping according to intelligence is accomplished, though this is not exact. The basis used is the junior high school teacher's estimate and results on the Otis Self-Administrative Test of Mental Ability.

Outline of Orientation Course

The units of work covered during the semester are as follows: (1) orientation to the school environment; (2) giving of achievement and prognostic tests; (3) survey of the courses offered by the high school; (4) survey of colleges and trade and correspondence schools; (5) making of a three-year registration plan; (6) library methods for the library user; (7) learning how to study through actual study under the direction of the counselor; (8) good manners for everyday living; (9) personality and character; (10) vocations, and (11) parliamentary rules.

The units listed are not rigidly held to since the individual counselor is given freedom in working out his own course of study. He can make adaptations, additions and subtractions to meet the needs of his group.

Each pupil during his final semester makes a three-year registration plan, which outlines the subjects he expects to take during his remaining semesters in high school. He must decide upon what course he is to pursue and, after writing in the required subjects, has to elect others to complete the number required for graduation. This plan becomes a part of his permanent record.

His future registrations follow the plan he has made. It is obvious that if in actual programming of classes the pupil is left to others than the counselor who helped him make the plan a number of irregularities may be introduced that would cancel the good effect of having a registration plan. It is therefore necessary that the orientation department assume responsibility for programming of all pupils. Many of the conferences are taken up with these matters.

Vocational guidance, as it has been carried on in the junior and senior high schools, has often been a waste of time, because the pupil has been expected to choose an occupation at a time remote from the actual moment when he will enter the workaday world and also at a time when he is immature. The vocational guidance, then, that should be carried on by the counselor must be considered a sort of conditioning for the later choice of vocation. General types of vocations should be given consideration. At the time of making the registration plan, general vocational aims are taken into consideration along with the pupil's personal fitness for such activity.

Vocational counseling of a more specific nature should be pursued in group meetings at the twelfth-grade level. While for many this may still be rather early, to a large number expecting soon to enter business life such counseling will be beneficial.

Incipient Personality Difficulties

An important part of the work of the orientation department, and one that has received altogether too little attention, is that of attempting to adjust incipient personality difficulties. The word "incipient" is used because there are certain cases that the counselors should not deal with. These are problem cases of long standing.

Through the study of the confidential personal questionnaire, the autobiography and a composition in which the pupil sketches what he hopes to be in ten or fifteen years, many clues to personality difficulties are turned up that otherwise would not be suspected.

It is this type of trouble that the counselors should attack. They can best be attacked by cooperative effort and study. The personal adjustment committee, formed of the counselors as a nucleus and including the dean of boys, the dean of girls, with the principal, supervisor of secondary education and the city schools' psychologist as ex-officio member, exists to do this work.

Cases are referred by others besides the counselors, but the study of the individual case should be in the hands of the counselor who had the pupil in orientation class and knows

his whole history best. An interview should take place between the counselor and the pupil involved, in which he is drawn out as much as possible and during which a general picture of his mental and social life is obtained. A home call should be made to get an accurate picture of the home environment. This call may have to be delegated to existing agencies because of the press of work, but the picture would not be complete without it.

After these two steps have been taken, the counselor undertakes the study of the facts, together with any published material found bearing on such cases. A case summary then is made by the counselor for presentation to the committee in meeting. Discussion of the case is carried on in committee and recommendations are made. The counselor then follows up the case and endeavors to effect an adjustment. Naturally, the number of cases that can be studied is limited because of the many other duties of the counselors.

Individual Conferences

The personal adjustment committee fulfills another need. It is a clearing house for ideas on counseling and general policies to be pursued by all those interested.

Group counseling must be followed up by individual conferences with pupils. This means that the counselor must develop a technic for expeditious but adequate counseling. It is essential in this work, as in all of the other branches of the counselor's activity, that a friend-to-friend attitude be maintained. A stern, unsympathetic person will do no good as counselor, especially in the personal interview. Many pupils will voluntarily seek personal advice from their counselors if the way is made easy, like the girl who came to find out how she could gracefully get the "date" she wanted when another boy had asked her to go to a school dance, although she was expecting the right one to ask her later.

Besides trivial problems like this and others more serious, many pupils must be called into conference regarding the quality of their classroom work following receipt of a scholarship report. Registration and

programming activities demand many personal conferences.

The five preceding types of activity do not constitute the whole of education. The professional counselor cannot be charged with all the program, though he is vitally interested in it all. Classroom instruction obviously belongs to specialists in the various subject matter fields. Likewise, social counseling belongs within the province of the dean of girls and the dean of boys. Disciplinary cases are also for these officials. The nature of the work of the professional counselor precludes his being an administrative disciplinarian.

The work allocated to the deans is of utmost importance. Regular counselors of the orientation department take care of other types of work, permitting the deans to devote most of their time to this important phase of school work.

As now constituted, the social life of the high school is inadequately administered. Those who most need social contact with their fellows are those who least frequently attend social functions.

In helping the deans discover those pupils who need social educa-

tion the counselors can do much. It cannot be too strongly asserted that the orientation department is a service department, serving pupils, teachers and administration.

To serve the school most efficiently the counselor must have a complete record of each pupil. This demands the proper office equipment for preserving these records. Each pupil must have a folder in which the following records are kept: his registration plan, cumulative test record, questionnaire, autobiography, scholarship reports, reports of interviews, correspondence and possibly other facts.

Records naturally entail clerical work. An enlightened school administration will strive to furnish adequate help so that the counselor himself will be freed for the work for which he is hired. An intelligent clerk can perform all the routine clerical duties of the department.

Home Visits Are Helpful

There are other problems that can profitably be discussed in the junior and senior groups. Each counselor should take those pupils whom formerly he had in class. Furthermore, each year there are juniors and seniors coming from other schools who have not been in orientation class. These can well be met in groups several times a semester to give them information needed to make satisfactory adjustment.

The counselor's former orientation pupils may come to him at any time for personal conferences. In fact, most of his personal conferences at the office will be with these pupils, as the sophomores should be seen in class.

Another extension of the work of the counselor, which is often retarded because of the expense involved, is the making of home visits. Contacts with parents are invaluable in helping the pupil make satisfactory adjustment in school. Some parents will come to see the counselor, but, by and large, parents of high school pupils allow their children to shift for themselves in the high school environment, and if there is to be any contact with them, the counselor must make it. It is through personal conversation that this contact is best made.



How to get a date with the right boy is a sample of the personal problems brought to the guidance counselor. Trivial as well as serious problems come his way.



The Public Has a

G. G. STARR



Two newspapers, one city and one school, keep the public informed concerning school activities and programs. Above: Typing class demonstrates the method of teaching the touch system in typing before a P.-T. A. group.

TO GAIN and maintain the wholehearted support of its constituency the present activities and future plans of a school must be clearly understood and accepted by its patrons. It is far more difficult to obtain support and cooperation after the venture has been planned than it is to get assistance if the community has had a part in the selection and promotion of the program. Not only will a more sympathetic attitude be manifested toward the project, but more knowledge concerning it will give the group greater opportunity to render efficient service in its accomplishment.

Whenever the school executive experiences opposition or criticism of an educational procedure, he will discover upon investigation that in almost every case the public has not been adequately informed. That more rapid progress can be made when the superintendent works out the plans and foists them on the patrons of the school is a fallacy. Even though it takes more time and effort to get the activity started, it will make greater strides when the public thoroughly understands it.

Many changes have taken place in the educational system since the parents of the present school population attended. Since leaving school they

have been busy getting started in life and have not had much opportunity to become acquainted with these alterations. As they have children in school now, their interest and attention are once more directed to the school. Small wonder is it, then, that parents have some difficulty in understanding educational procedure as it is practiced today.

Together with these changes there has been a great shift in the educational philosophy. Education, instead of being considered as impressive in method, is thought of as expressive. Rather than impress on the pupil's mind information with the belief that it will bring forth the correct responses, emphasis has been placed on expressive methods, such as the activity school and the project method.

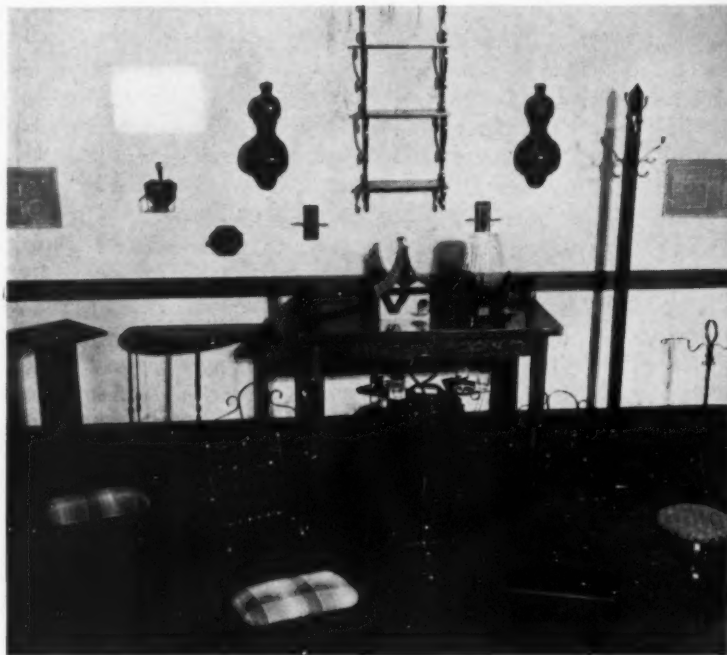
Believing that a better understanding of what the school is doing is needed, the Arcanum School at Arcanum, Ohio, has been attempting to interpret its work to the commu-

nity. Some of the avenues through which this interpretation has been made are the handbook, school movies, school and local newspapers, school exhibit, P.-T. A. programs and American Education Week.

The handbook was considered a valuable instrument. On the title page appears the declaration of purpose: "Handbook — The Arcanum Public School, a Manual of Information for Students, Parents and Teachers, Prepared by the School Faculty." The handbook, a 78-page booklet, was typed and mimeographed in the commercial department.

At teachers' meetings before the handbook was begun, the following principles were agreed upon: The booklet should be prepared for the definite purpose of interpreting the school to the people of the community. It should be a teacher product and contain an explanation of every phase of school activity. Every statement in the book was to be in accord with an educational philosophy ac-

Right to Know



Above: A section of the industrial arts exhibit arranged to show the varied kinds of work. At right: Pupils were given special leaflets describing school work to take home during American Education Week.



cepted by members of the faculty. The terminology was to be nontechnical and comprehensible.

A copy of the handbook was given to interested patrons of the school and to all the homes from which pupils came.

Because of the local interest in visual education the school movie was used for interpreting the school. The central aim of this project was a description of the work of the school instead of pictures of pupils. The pupils were the only actors in the play, "A Day at School," an attempt to show the operation of the school from the opening in the morning until dismissal in the afternoon.

The story was written, the scenes were outlined and a photographer who had some experience in this field was employed. Eight 500-foot reels of 16-mm. film were taken with a medium-priced camera and four photo floodlights were used for the inside shots. The pictures were comparable to those used in the visual

education program. These motion pictures were shown to the community at a night program and were explained by a teacher through the school amplifier, making them similar to a sound picture.

This venture justified the cost, effort and inconvenience that were necessary in taking the pictures. The faculty believes that this has been one of the best projects used thus far to develop an interest in the school program.

The news of the school reaches the community through two papers, the school paper, *Arc-Hi News* and the local newspaper, *Arcanum Times*.

The *Arc-Hi News* is a biweekly mimeographed paper with a pupil staff; it is sponsored by the commercial teacher. Although the paper is edited and published by pupils, it contains valuable information about the school which goes directly into the homes and is read by the entire family. This paper carries feature articles on assembly programs, school

work, club work, music activities, school sports and numerous other extracurricular activities that need to be explained to the community. During the three years that this publication has been issued it has made a valuable contribution to the interpretation of the school.

The local paper has granted one column each week for news of school activities. The reporter has been faithful in his duties and has been able to furnish material which explained the worthwhile projects of the school. Numerous stories requested by the editor have been promptly supplied.

Special care has been made in both papers to have the news represent the entire activity of the school. With an eye on every department the amount of material is weighed according to its relative value.

Each year during the last month an exhibit of outstanding school work is presented. The display has included work done in each of the elementary grades and in each department of the high school. It is correctly labeled as to type with the pupil's name artistically exhibited so that visitors can enjoy each article.

A personal invitation sent home with pupils has resulted in large at-

tendances at school exhibits. A special program sponsored by the music, dramatic and visual education departments provided for the exhibit.

The school accepted an invitation to present some phase of school work at each regular meeting of the P.T.A. A typical classroom situation was set up on the stage for an elementary grade or a department of the high school for practical demonstration of some type of activity. Examples of work that has been given include the teaching of new songs to an elementary grade by the music teacher; the touch system in typing by the commercial teacher; leather and metal working by the industrial arts teacher, and group games by the physical education instructor. After the demonstration the instructor discusses the nature of his work and answers questions. In a few years the entire work of the school may be explained.

American Education Week, because of its national import, offers

the school an excellent opportunity to call the attention of the community to the activities of the school.

This year the Arcanum School secured the cooperation of the local ministers who presented sermons on the subject on Sunday; sent home each day leaflets obtained from the N.E.A., together with others prepared by the local school; urged all patrons of the community to visit the schools during this week; sponsored a tea each afternoon at the close of school to which visitors and teachers were invited, and held an assembly during the week at which an educational topic was presented.

Another feature that has been successful is a "Pop and Mom" night. The regular program of the school is operated at night for the parents only. They visit classes which their children attend during the day with the regular teachers in charge. In these classes instructors explain the nature of the work and answer questions parents ask.

shelter can he be expected to attack his second problem of finding a "more abundant life."

Such a concept calls for a revision of educational practices. It means making each individual economically independent as soon as possible. It means providing the essential tools of knowledge, the basic health habits, the foundations of a desirable personality and a degree of vocational skill without delay.

As soon as man can free his mind from the daily problems of acquiring food and shelter he is available to partake of the "finer things in life." It is folly to teach persons subjects they are not physically or psychically ready to receive. Interests in government, biography, history, literature and the causal agents back of certain phenomena come rather late in life. Interests in sex and home establishment reach their height in late adolescence and perfection in these is a matter of some years.

The leisure that follows economic security provides the opportunity for attaining proficiency in these avocational interests. Economy in curriculum building would be to teach those things that pupils are ready to accept according to their rate of development. This means getting a youth ready to accept employment and marriage as soon as possible, and then providing him with the opportunity to become proficient in the arts and letters as his leisure time increases. It means providing an opportunity to change his activities as his interests change. It means specialization before generalization.

Just because our social order provides youth with leisure and adults with none is no reason our social order is right. Maybe the order had better be reversed, and parents who are forced to "keep their nose on the grindstone" to provide the leisure which so often is detrimental to their children be freed from this burden by placing youth at work during his most productive age for work and his least productive age for leisure.

Education for youth could better be largely vocational, and education for adult a matter of finding the "more abundant life." This procedure—specialization before generalization—would be sounder in the broad as well as the narrow sense.

Specialization First

D. M. HALL

NO ENVIRONMENT is stationary, not even the geologic environment. If indoctrinators, whether political, religious or educational, attempt to fix a certain mental set they are certain to do some degree of harm. Human nature changes as do the rocks or the soil, and it is reasonable to expect it to change the faster. Flexibility rather than rigidity is a virtue of the human mind. With a continuously changing environment there never will be a time when human beings are not confronted with problems.

In general, most persons have basic wants that are similar. In particular, individuals differ as to the amount that will satisfy their wants. These individual differences are the products of society, just as society is the product of individuals. The mold is set by a vast network of conventions, traditions and precedents. Thus the divergence of opinion as to how much is necessary to satisfy.

If democratic political orders aim to help each individual develop up to the limits of his capacities and if individuals always have problems then an educational agency should be available at all times to assist each to solve his problems. His first problems will be related to his economic security.

Those who dictated educational policies in the past have been persons who had already attained some degree of economic security. They organized a liberal education for the free man, man freed from the necessity of work. The theory has changed but the practice continues. Today education provides a broad background before specialization. It is not sound from the basis either of securing thought or of supplying man's needs. Thought motivation originates in problems, and a broad background approach presents no real problems. Only after man has satisfied his needs for food and

High School Truants

Survey of Attendance Literature

L. C. HALBERSTADT

AGE, teachers' marks, illness, intelligence, truancy and the cycle of high school attendance are the important factors so far studied, a survey of the literature on high school attendance shows. Minor factors that have received little attention are home work, time of year, courses of study, holidays, weather, church attendance, social background, size of family, nationality, scenic advantages, railroads, commercial districts, parks, good streets and sex. Perhaps there are others that have received little or no attention.

High school attendance is receiving more attention than formerly, because of state aid laws and the wider attention the public is giving to the high school.

Poor attendance is due to an unfortunate combination of two or more factors. It is important that we recognize the bearing of these many factors so that high school attendance may be more intelligently administered. Taxing programs, state aid laws and the importance of the functions of the high school call for a better understanding of the subject. The literature points to the following conclusions.

Conclusions From Reading

1. The high school perhaps has more serious problems of attendance than any other school.

2. There is a progressively increasing percentage of absence among pupils from 13 to 16 years of age. Many causes, such as over-age, lack of school progress, truancy, lack of school adjustment and lack of school holding power are operative. There is a decline from the age of 16 resulting from better adjustment, better holding power and elimination. Compulsory age laws aid in producing this critical age period.

3. Teachers' marks have a positive relationship with high school attendance. Correlations of .34 and .38 have been found as proof of this. On the other hand, a negative correla-

tion of .347 has been found between absences and teachers' marks.

4. The best grades are made by good attendance groups and vice versa.

5. School progress has a correlation of .27 with junior high attendance.

6. Illness is a common cause of absence. Present evidence shows it to be the main cause of poor attendance. Crests and peaks are noted for certain years and months. Spring semesters have a high per cent. Various studies indicate that illness may cause more than 50 per cent of high school absence. Girls are absent more than boys as a result of illness.

I. Q. Negligible Factor

7. Intelligence affects high school attendance only in a minor way. A correlation of .06 has been found between school attendance and test scores. Also a negative correlation of .0522 has been found between days absent from school and test scores.

8. Truancy is common in the high school and is related to age. Most truants skip school only once but a few become chronic offenders. There is a progressive rise in truancy beginning with the new semester, reaching its peak in a few weeks and steadily declining toward the end. Perhaps 5 per cent of the high school population is truant. Boys are more often guilty than girls. Truancy is less common in periods of depression when job hunting is more or less fruitless. It is more common in the spring semester. Broken homes, bad home conditions, lack of school adjustment, small family income, bad companions and poor intelligence are listed as the main causes of truancy.

9. The high school attendance curve varies inversely with the eco-

nomic cycle. There is also a relationship between the high school attendance curve and the death rate. These cycles were less pronounced before 1910. The minor crests, peaks and valleys are due to other factors.

10. The minor factors of attendance listed above have been given little attention. They deserve more attention. They are perhaps more important than we may think.

11. Can a study of high school attendance reveal anything concerning the holding power of the high school day in and day out? Or does legal absence measure day by day the high school holding power? Legal absence in the high school may be a pulse beating day in and day out that measures the high school blood pressure.

The foregoing summaries indicate the significance of certain factors. Further studies should be made to check and enlarge their significance. The critical periods of high school attendance have been pointed out. Each semester has significant periods in which special attention should be given to correct, so far as possible, tendencies toward truancy and illegal absences.

Season Affects Health

It is usually obvious that certain periods in the week, month and year need attention from a health point of view. Guidance can assist in bringing about better adjustments to the school program. School progress has a definite correlation with high school attendance.

Principals, deans, directors of guidance, homeroom teachers and all members of the staff should become familiar with most of the foregoing facts so that better school progress and school adjustments can take place. The point of view of all who deal with high school boys and girls

should be that of helpfulness. School organization should have this end in mind. Boys and girls who are well adjusted in their school work can give valuable aid, and homeroom, club and guidance organization can make their contributions. Teachers must become students of the problem of high school attendance and must learn to recognize the critical periods, as valuable help at the right time will save many a boy and girl. Such help will pay valuable dividends to school and to pupils.

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Police, Puppets and Grade Pupils



In Detroit the police have a puppet show which they use to good effect in teaching traffic rules to children in the primary grades. In a three-act play the marionettes have many experiences on a street crowded with two-way traffic. Miniature Oldsmobile cars moving on motor driven belts form the chief traffic hazards for a little girl who runs into the street and is pulled to safety by a patrol boy. Patrolman Fred Wright and Herbert German pull the strings. The play was written by Priscilla R. Marble of the National Safety Council.

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Remedial Reading

CHARLES F. TOWNE

ONE of the major causes of failure in high school is the lack of the ability to read with understanding. Until recently, the teaching of reading has been considered as the function of the elementary school, and it is only now that we are coming to understand that there is need for remedial reading instruction not only in the elementary schools but in the junior and senior high schools as well.

The presence of large numbers of pupils in the senior high school who are unable to read with comprehension the usual textual material presented in the courses has finally focused the attention of high school teachers upon this problem.

Suitable Material Is Scarce

Three years ago, Elmer R. Smith, head of the English department of the afternoon session of the Central High School, Providence, R. I., made a survey of the reading ability of the 882 pupils then entering the 10B class. The results of the survey showed that a substantial number of these pupils were in need of remedial instruction in reading, but when a search was made for suitable material for such instruction, the field was found to be extremely limited.

At first the search explored the field of English literature. The respectable literary masterpieces usually used in high school courses were examined with attention to vocabulary, sentence structure and story interest. For the most part, this material was beyond the reading capacity of the pupils. A further search for satisfactory material investigated fields that, from a literary standpoint, were not rated as wholly respectable. Even the sporting page and the comic strip were investigated.

As a result of these exploratory activities several modifications were made in the program of instruction but, after all the modifications had been completed, it was still clear that

the primary problem was that of remedial reading. Unless a person can read with understanding and appreciation, there is little likelihood that he will gain much from the intensive study of literary masterpieces. Under the leadership of the head of the English department, a determined effort was made to provide instruction that would help to improve reading ability. An account of these efforts, as outlined by M. Olive McMichael, English teacher, follows:

During the first week of the term a study was made of pupils in three low classes. Results showed that during the summer no one had read more than three books, and a large majority had read one or part of one book. Magazines had been looked at for pictures, puzzles and jokes. The two most popular magazines were *True Story* and *Liberty*. A checkup on the number holding library cards revealed five to be the maximum number in any class.

Reading Aloud Is Revealing

Oral reading was tested. Three sentences were read aloud by each pupil. Many pupils could not recognize or pronounce the common, ordinary words of our language. This test had nothing to do with word-meaning or comprehension. This led to a drill in phonics, similar to the work done in the early grades of the elementary schools. Five minutes of rapid practice on this type of work three times a week has been of great assistance in word recognition.

On the other two days of the week, practice was given in vocabulary building. The words selected were from Thorndike's "List of Ten Thousand Words That Appear Most Often in Books and Newspapers." The time spent on these words varied from five to ten minutes. Results from this work were excellent. Brief definitions were given until a class, numbering 32 pupils, thoroughly understood each word. Then it was

suggested that pupils watch for these words in their daily newspapers and, if they found them, cut out the article or articles containing them and bring the clipping to class.

At the end of the week, tabulated results showed the following number of clippings per word:

adequate	36
administration	160
adjudge	42
adjust	28
admonish	31
adieu	39
adhere	35
advantage	78
adoration	15
adventure	54

Today each pupil in the three low classes is provided with a large white envelope and daily has an opportunity to place therein his newspaper clippings. This work serves a double purpose: (1) new words are being added to vocabularies, and (2) newspapers are being read.

To increase speed in reading, various exercises in "Experiments in Reading" have been used. The second week of the term the average rate of reading in these classes was three or four words per second. Estimation showed, therefore, that the average reader would need almost an hour to read 20 or 25 pages of simple reading material. To awaken pupils to the significance of this slow reading several plans were used.

Various Devices Tried

1. "Reading Through Precis," by Bessey and Coffin, offers much worth-while material. The exercises are short enough to permit rapid work. By means of them a pupil can see readily his reading ability. Some of these exercises the classes read for speed, thought and comparison. Other quotations were read with a definite two or three-minute time limit. Other selections were read for the purpose of finding answers to two or three leading questions.

This kind of work was poor at the beginning, but at the expiration of four weeks decided improvement

could be seen. The pupils are conscious now of their reading ability or inability.

2. The newspaper has offered another source of actual testing in reading. Three different sections of the paper were selected for this work to convince pupils that speed in reading will vary under the type of material read.

Reading for news facts resulted in the fastest reading. The average rate for this was 90 words in twenty seconds.

Reading for direction or information was slower. Use was made of the want ad section. The pupils were asked to read one specified advertisement and then to stand. Results showed each had read too rapidly and could not retell main facts of the advertisement. The next time, each was to read until he found the answer to three facts: (1) type of work sought; (2) place of employment including address, and (3) place of application. This kind of reading was slower but with practice became better.

Reading for pleasure, as evidenced in the "funnies," produced more lip reading than had been noticed before. It seemed as if pupils needed to say the words of the characters before they could understand the story. This kind of reading was much slower than had been expected. Another lesson, however, spent on this kind of work showed improvement. Pupils are now keeping records of their progress in newspaper reading.

3. The device suggested by Pitkin of increasing the number of words seen in one glance also was tried. To this end, use was made of large-type newspaper clippings pasted on cardboard. The number of words read in a single eye-fixation glance was either one or two in these classes at the beginning of the experiment. By means of these flash cards the number has been brought up to four, five and six in some cases.

4. In order to make pupils more conscious of their slow reading, two other devices not mentioned by our authorities on reading skill were used. Several copies of telephone directories were brought into class. They have been used in various ways: we gave four names and asked for addresses; we gave three names and

asked for telephone numbers, and we gave four names and asked for occupations. This is an exercise in skimming that leads a pupil to know, undoubtedly, whether he is fast or slow. More than some other exercises, it has made pupils conscious that they need speed.

5. The second device is the use of the weekly advertisement sheet from various chain grocery stores. Evidently these papers get into the homes of all pupils. They offer a variation from textbooks, and pupils like to work with them. Some of the exercises tried with them were as follows: (a) reading a column to see what five kinds of food should be served at a Halloween party; (b) reading with a twenty-second time

Instruction for poor readers in high schools of Providence, R. I., has lead to wide voluntary reading, which, as would be expected, has furthered the appreciation of literature

limit to note the four common uses of sugar; (c) looking at pictures of four children to see from what state each one came, and (d) getting the prices as quickly as possible of three different kinds of food.

After an exercise of this type, a pupil knows whether or not he should increase his speed of reading.

In considering literature, it was found early in the term that the voluntary reading blanks meant nothing to these pupils. Books had to be obtained from the library and actually placed in their hands. By making limited assignments in them results were obtained. A chapter was assigned to be read or a single short story. In this way the amount of reading has been built up. Actual results would show that two or three stories would be read or that two chapters would be completed.

After five weeks of this "forceful" encouragement, reports on voluntary reading are being made. This is partly due to the fact that most pupils now have library cards.

In addition to the 10B reading list, use is made of the list of books suggested in "The Experience Curriculum." During the past week our voluntary reading reports have included Greek and Roman stories, myths and legends. Within the past few days "Following Printed Trails" by Carol Hovious and "Reading for Skill," by Broening et al. have been added. Both books are good.

As the seventh week of the term draws to a close it is felt that this kind of work has been much worth while. Pupils have progressed. Tests given in each class Monday or Tuesday of this week have shown that every pupil, with the exception of two in each class, has increased his speed of reading and his ability to comprehend what he has read. It has not been a 50 per cent increase in reading skill in each case, but it has been in many. Pupils now read for main ideas and for general directions. It is hoped before the term ends that they will be able to read to "predict outcomes" and to "appreciate significance."

We have always hoped that our high school pupils would learn to love and appreciate literature in spite of the fact that they were required to present formal book reviews and that, failing this, they were subject to traditional penalties.

Our present plan is to abolish formal reviews and traditional penalties, to provide material that is built around centers of interest and enjoyment and to permit individual reading in the classroom. For example, a boy is interested in adventure or exploration. Another is interested in biography or travel. It is one of the functions of the English teacher to encourage the pupils to bring into the classroom the books which they are finding of immediate interest and to provide an opportunity for them to read during the class period. Through discussion and an exchange of experiences between pupil and pupil, and pupil and teacher, the level of appreciation is gradually raised and good habits of reading are developed.

The motion picture is today providing a large part of the entertainment formerly obtained from reading. The modern school will utilize the motion picture and the

radio to stimulate and to round out literary experiences. A discussion in the English class of such a motion picture as "David Copperfield" and of some of the dramatic sketches that are presented over the radio is a valuable exercise and is being capitalized in the development of appreciation and taste. The English class also provides frequent opportunity for discussion of individual reading and fosters a close cooperation between the school and the public library.

Building a course of literature around centers of interest or strands of experience, as suggested by the "Experience Curriculum," is less difficult today than formerly. The publishers have responded to this need by presenting material built around such centers. For example, one series presents material gathered around the following centers: "Animals and Their Ways," "Imaginative Tales," "About Boys and Girls" and "With Those Who Dare and Do." Reading of this kind provides experiences with and through literature.

To read with appreciation there must be a reasonable mastery of the art of reading. A school system may well focus attention on the reading process by a reading campaign for all groups, by providing corrective work in groups for mildly remedial readers and by remedial work for poor readers.

A most important factor in a successful reading program for today lies in its emphasis upon the contemporary. Even the conservative College Entrance Board has included some contemporary literature in its new requirements, and for those groups that are not definitely going to college we may well lay much greater stress on contemporary writings.

There is a movement now gaining momentum that looks toward the correlation of history and literature. Its purpose is to make pupils more aware of the problems of the day and to stimulate attitudes of intelligent and social minded participation in their solution. Probably more history is learned from the reading of historical novels or stories with a historic background than from the study of historical textbooks. Material for the correlation of history and literature are found in our modern maga-

zines such as the *Atlantic Monthly*, *Scribner's*, *Harper's* and the *Reader's Digest*. The use of these in the classroom challenges the interest and enthusiasm of pupils and teachers and provides the basic material for real literary study. Publishers have also helped by providing such material as "Our America," "The March of a Nation" and "Leadership in a Changing World."

For pupils who are in need of remedial instruction, the reading material must be selected with care and judgment. Because a pupil is in the high school, it is often assumed that his reading ability is much greater than it really is. Consequently, for remedial groups some of the reading material must be of no greater difficulty than that required of a fourth or fifth grade pupil. It does not do, however, to put into the hands of these pupils texts that were primarily prepared for the low grades, and it is only recently that publishers have commenced to offer suitable material.

As illustrations of the kind of material suitable for these groups, I mention the following titles: "Adventure Bound," "New Horizons" and the "Living Through Biography Series."

No argument is necessary to demonstrate the fact that the ability to read with understanding is one of the skills necessary for success in our modern schools. As children remain longer in school, individual differences become more and more pronounced and the necessity for reading skill becomes paramount. For too long teachers and school administrators have assumed that the child had learned to read in the lower grades and, consequently, was equipped to go into the higher grades when such was not truly the case. Reading skill and ability to study are closely related. Skill in reading and the appreciation of literature go hand in hand. Few indeed can begin to appreciate literature unless they can read with facility and with understanding.

Reading Clinic in Every School

THE time is near when all school systems and even individual schools will have reading clinics and reading specialists to deal with problems of reading improvement on every school level, Dr. Stella S. Center, member of the board of examiners of the New York City schools, prophesied recently at the convention of the National Council of Teachers of English.

"Only about 40 per cent of the boys and girls applying for admission to our high schools can read with such skill as to warrant prediction of success in high school," declared Doctor Center, who organized the clinical reading school at Theodore Roosevelt High School as a federal educational project.

"We build an educational system around the idea that pupils must master books and then we fail to teach them how to read. Our system of education graduates pupils who take little satisfaction in reading and depend chiefly on tabloids, motion pictures and the radio for intellectual

stimulus, which is poor fare indeed.

"A program of instruction in silent reading skills on all school levels from the elementary school through junior college is needed. Sufficient skill in reading cannot be acquired in elementary school. Even pupils who attain a fair degree of mastery by the sixth, seventh or eighth grade lack the mental maturity to master all the reading skills the adult needs if his education is to be continuous with life itself.

"Silent reading tests should be used to organize homogeneous recitation groups. This homogeneity is our best substitute for individual instruction and it isolates the problem of the retarded reader who needs clinical help. I recommend a crusading campaign to convince boards of education, taxpayers and ourselves that the business of the school is to teach people to read, as Carlyle said one hundred years ago, and that we need equipment and trained teachers if we are to develop a literate electorate."



New Technic for Meetings

THE technic described here was used in a recent all-day meeting of the Michigan Council on Education* and represents a variation of the forum-interview-resource program. Two months prior to the meeting, the executive board of the council met to plan the program. The chosen theme was: "What Is Being Said About the Practices in Education and the Leaders Who Are Responsible for Them?"

In order to obtain data on this question from samplings of the lay population in various parts of the state, the secretary was asked to prepare an interview-report blank to be used by members in interviewing the general public. This blank listed the following questions:

1. In what way, in your opinion, are the schools failing?
2. In what way are the schools doing a particularly good job?
3. Do you think the teachers are equal to their responsibilities?

*The Michigan Council on Education is composed of eighty-two members. Sixty-one are major executive officers of state educational institutions and organizations and the remaining twenty-one are members-at-large. The council serves as a clearing-house agency for the coordination of plans involving many educational groups.

LEE M. THURSTON
and
CHESTER F. MILLER

4. What do you think of the methods the schools use?
5. Do you think the schools are getting enough money?
6. Do you think the schools should take more responsibilities?
7. Do the schools keep you properly informed?
8. What subjects and activities should be eliminated?
9. How would you improve methods of dealing with school children?
10. How do present methods represent an improvement over methods used when you were in school?

Forty-six members carried out the assignment, reporting interviews with approximately 540 persons. These interview-reports were made available to the discussion leaders for study prior to the meeting.

The morning meeting was opened with an overview of the day's program presented by a person skilled in the technics of group discussion. The interview-report data were presented

by a second speaker, who distributed copies of a summary of significant tendencies in public opinion. These were discussed.

A third speaker evaluated the reports, diagnosed the causes of criticism, made application to the state and national educational situations and proposed remedies. The entire group carried the discussion forward.

After luncheon and business, members separated into five groups, each with a discussion chairman, for small-group conferences on what should be done about the problems presented at the morning meeting. Small-group forums lasted an hour.

The council then reconvened, each small group reporting the significant outcomes of its discussion. The chairman offered a number of appropriate suggestions in the way of action by member organizations.

There was an obvious tendency on the part of members to interpret criticisms in terms of their bread-and-butter problems instead of those of the professional organizations they represented. The conference brought about an alertness to the value of criticism as a basis for improving professional practice.

Judge-Made Law on Tenure

M. M. CHAMBERS

WITHIN less than one year the Supreme Court of the United States has handed down three decisions directly affecting the social security of public school teachers. Two of these cases involved teachers' tenure laws, in the states of New Jersey and Indiana, respectively. The third dealt with an Illinois statute providing noncontributory pensions for retired teachers in cities of that state.

In each case the chief question was whether the state, by recent amendments to its tenure or retirement law, had deprived certain teachers of rights protected by Article I, Section 10 of the Constitution of the United States, which provides that no state shall pass any law impairing the obligation of a contract. In all three cases the opinion of the court was written by Mr. Justice Owen J. Roberts. The court was unanimous in two of the cases, but in the third a single dissent was entered by Mr. Justice Hugo L. Black.

The first case to reach the court touching teachers' tenure was from New Jersey. In 1933 the New Jersey tenure act was amended by a proviso authorizing local school boards to fix the salaries of all their employes for the period from July 1, 1933, to July 1, 1934, "notwithstanding any such person be under tenure."

The new act also prohibited any increase in any salary during the year indicated, set a minimum below which salaries could not be reduced and prohibited discrimination between individuals in the same class of service. Its purpose was to enable boards of education to effect reduction of their pay rolls on account of the stringency of the depression.

The board of education of the town of West New York, N. J., accordingly reduced the salaries of its teachers by 10 to 15 per cent, according to classes of service as determined by the salary brackets. A group of teachers on permanent tenure resisted this reduction, their principal contention being that the act of 1933 impaired the obligation of their con-

tracts with the school district. In other words, it was argued that under the tenure act of 1909, "three years of service under a contract confer on an employe of a school district a contractual status indefinite in duration which the legislature is powerless to alter or to authorize the board of education to alter."

The supreme court in New Jersey held that the act of 1909 "established a legislative status for teachers, but we fail to see that it established a contractual one that the legislature may not modify. . . . The status of tenure teachers, while in one sense perhaps contractual, is in essence dependent on a statute, like that of the incumbent of a statutory office, which

Judge-made law touching teachers' tenure is a little uncertain, a survey of three recent U. S. Supreme Court decisions shows

the legislature at will may abolish, or whose emoluments it may change." The United States Supreme Court sustained this view.

Summing up the opinion, Mr. Justice Roberts wrote: "Although after the expiration of the first three years of service the employe continued in his then position and at his then compensation unless and until promoted or given an increase in salary for a succeeding year, we find nothing in the record to indicate that the board was bound by contract with the teacher for more than the current year. The employe assumed no binding obligation to remain in service beyond that term. Although the act of 1909 prohibited the board, a creature of the state, from reducing the teacher's salary or discharging him without cause, we agree with the

courts below that this was but a regulation of the conduct of the board and not a term of a continuing contract of indefinite duration with the individual teacher."¹

An Indiana act of 1927 created a tenure system in all school districts of the state and provided for a five-year period of probationary service, after which a teacher would acquire permanent status if reemployed by the same school corporation. In 1933 it was repealed insofar as it applied to township school districts. Soon thereafter a teacher who had completed the probationary period and acquired permanent status in a township district prior to the act of 1933 was dismissed in a manner not authorized by the tenure law. The theory of the school trustee was that the status of permanent teachers in township districts was destroyed by the act of 1933.

The supreme court in Indiana sustained this theory, with one of its judges vigorously dissenting. The aggrieved teacher carried her case to the United States Supreme Court on the ground that she had a valid contract of indefinite duration with the school township and that the act of 1933 impaired the obligation of this contract.

The chief argument in opposition was "that in enacting laws for the government of public schools the legislature exercises a function of sovereignty and the power to control public policy in respect of their management and operation cannot be contracted away by one legislature so as to create a permanent public policy unchangeable by succeeding legislatures."

This contention is met and overturned by the following quotation

¹Phelps v. Board of Education of Town of West New York, 116 N. J. L. 412, 185 Atl. 8; affirmed, 300 U. S. 319, 57 S. Ct. 483, 81 L. Ed. 674 (March 1, 1937).

from the opinion of the court: "Nevertheless, it is established that a legislative enactment may contain provisions which, when accepted as the basis of action by individuals, become contracts between them and the state or its subdivisions. . . . If the people's representatives deem it in the public interest they may adopt a policy of contracting in respect of public business for a term longer than the life of the current session of the legislature." The Indiana tenure act speaks repeatedly of the making and canceling of indefinite contracts, and in three sections of the act (not to mention others) the word "contract" appears twenty-five times.

Conceding that "every contract is made subject to the implied condition that its fulfillment may be frustrated by a proper exercise of the police power," the court continued: "The causes of cancellation provided in the act of 1927 and the retention of the system of indefinite contracts in all municipalities except townships by the act of 1933 are persuasive that the repeal of the earlier act by the latter was not an exercise of the police power for the attainment of ends to which its exercise may properly be directed." Accordingly the judgment of the Indiana court was reversed, and the case remanded for further proceedings not inconsistent with the opinion of the United States Supreme Court.² This means that tenure teachers in Indiana township schools did not lose their status because of the enactment of the repealing act of 1933.

The dissenting opinion by Mr. Justice Black says: "In my opinion this reversal unconstitutionally limits the right of Indiana to control Indiana's public school system." And further: "The intent of the New Jersey act and the intent of the Indiana act were evidently identical and, in view of this fact, I believe that the decision on the New Jersey appeal and the majority decision on the Indiana appeal are irreconcilable."

An Illinois act of 1926 provided for compulsory retirement of teachers in certain cities at specified ages, and stipulated that each such retired

teacher should receive an annuity of \$1500 per year for life, payable wholly out of funds derived from taxation for general educational purposes. This annuity was not in lieu of, but in addition to, any allowances received under preexisting retirement laws. An act of 1935 amended the act of 1926 by reducing the age of compulsory retirement and reducing the annuity to \$500.

The Illinois courts held that the reduction must apply to all beneficiaries under the act, including those previously receiving the annuity of \$1500. This was challenged on the ground that as to these beneficiaries the amendment of 1935 unconstitutionally impaired the obligation of a contract. The Supreme Court of the United States held that no contract exists in a pension plan such as this. The annuity is merely a gratuity which the legislature may reduce or take away.³

This case was decided after the New Jersey tenure case and before

²*Dodge v. Board of Education of the City of Chicago et al.*, 364 Ill. 547, 5 N. E. (2d) 84; affirmed, 58 S. Ct. 98, 82 L. Ed. 77, 1937.

the Indiana tenure case. Therefore an extract from the opinion is of special interest in examining the consistency of all three decisions.

Mr. Justice Roberts says here: "An act merely fixing salaries of officers creates no contract in their favor, and the compensation named may be altered at the will of the legislature. This is true also of an act fixing the term or tenure of a public officer or an employe of a state agency" (citing the New Jersey tenure case).

If this means that a teachers' tenure law may be changed at will so as to destroy the status of a permanent teacher, acquired before the change, it would seem incompatible with the recent decision in the Indiana tenure case. If it means only that the compensation of a tenure teacher can be changed, then it is certainly in harmony with the earlier holding in the New Jersey tenure case. Whether the two tenure decisions are reconcilable was, as already noticed, a matter of dispute within the court itself. Probably in future cases a less uncertain body of judge-made law touching teachers' tenure will be built up.

Teachers Unable to Use Tools

G. P. CAHOON

TEACHERS of physical science, even those with majors in physics, chemistry or general science, do not possess adequate abilities in the use of apparatus, materials and tools which are deemed important in working effectively with boys and girls.

A study involving more than 300 science teachers indicated that many experienced as well as prospective teachers of physical science were extremely limited in their abilities to use even the most simple and commonplace laboratory apparatus and tools.

Half or more of the groups studied indicated either by actual performance tests or by self-appraisal that they did not know how to use a battery charger, to test electrical fuses and circuits, to operate and adjust a motion picture projector, to do simple glass blowing, to solder wires,

to use and sharpen common tools, to connect relays, to demonstrate electrolysis of water, to construct simple mercury barometer, to read weather maps, to refill a fire extinguisher, to make common laboratory solutions, to take and print photographs and to test dry and storage batteries.

Most beginning teachers of physical science not only need but express a desire to have more first-hand experience in using apparatus, materials and tools relating to the actual problems of secondary school teaching.

A course for prospective teachers of physical science that offers opportunity to get experience in making demonstrations and in using laboratory apparatus needed in teaching secondary school physical science has been inaugurated at Ohio State University.

³*State ex rel. Anderson v. Brand*, 5 N. E. (2d) 531, N. E. (2d) 913, 7 N. E. (2d) 777, 110 A. L. R. 778 (1937); reversed and remanded by the U. S. S. Ct. Jan. 31, 1938.



Clerical assistants at work in a large high school. Their duties are outlined in this article.

Principal's Office Routine

JESSE L. WARD and KATHERINE MAYER

A HIGH calibered and responsible person is required for the position of chief clerk in an efficiently operated office of a large high school. The administrative activities of the high school principal center in and clear through the high school office. The principal works through assistant principals, deans, secretaries, clerks, committees, visiting teachers, departmental chairmen, student councils, librarian, attendance officer, cafeteria managers, health staff, athletic director and other assistants. He integrates the work of the subordinates in the central office.

Scientific selection of responsible clerical assistants presupposes not only an activity analysis of the job, but a personnel analysis of the per-

son selected. The following is submitted as a fair sampling of clerical responsibilities and activities in a school with an enrollment of 2200. It might be called the minimum for a school with 2000 pupils.

The division of labor usually is allotted to a chief clerk and three subordinate clerical assistants, the executive clerk and treasurer, the record clerk and the book clerk.

The duties of the executive clerk and treasurer may be summarized as follows:

1. Planning, distributing and supervising office work based on the school calendar.

2. Keeping a daily record of teachers' attendance for compilation of the monthly pay roll report, including the calling in of substitute teachers and a weekly report to the board of education on attendance.

3. Making an account of all money collected by teachers or pupils. This necessitates the keeping of three separate accounts: receivable, payable and a complete monthly report to the board of board of education funds, extracurricular funds and athletic association funds.

4. Supervising the credentials of the senior class, listing candidates for graduation, ordering diplomas,

arranging the procession and preparing commencement tickets.

5. Preparing the principal's report required by the state; the report to the North Central Association of Colleges and Secondary Schools; the state statistical report, and the special annual athletic reports to the secretary of the state high school athletic association.

Special duties of the record clerk include: (1) daily permanent office records of absence and tardiness handed in by class deans; (2) weekly census report to the board of education; (3) monthly statistical report and little annual report (average of monthly); (4) record of dropped subjects and other changes on schedules and notification of teachers concerned; (5) freshman failure report to grade schools at end of the first semester; (6) the ordering of supplies; (7) annual requisitions for the various departments, and (8) order and sale of hall and gymnasium padlocks.

The book clerk's special duties are: (1) semiannual order of books, textbooks and supplementary readers for sale to pupils through the board of education; (2) receipts for books on a special education form; (3) arrangement of books on shelves by subjects for sale; (4) sale to pupils throughout first week of each semester and three days per week thereafter; (5) balance of each day's sales; (6) loans of books to pupils unable to pay; (7) card file record of books lent; (8) recall of books lent at end of each semester; (9) monthly report to board of education of books sold, books lent, teachers' requisitions, books sent to other schools and inventory of remaining books and total money received; (10) card file record of monthly reports; (11) annual book report, and (12) annual report of books lent and their monetary value.

The record clerk and the book and credit clerk have certain joint duties, as follows: (1) the obtaining of credits of pupils transferring from other schools and the recording and filing of these; (2) transfer of credits of withdrawals to other local high schools; (3) record of advanced standing reports handed in by teachers; (4) principal's personal school correspondence; (5) transfer of

credits for pupils moving out of town; (6) the filling out of college and university certificates for graduates; (7) the averaging of senior grades to determine class ranking; (8) the listing of pupils in the upper third of the graduating class for honor society rolls, and (9) the recording of results of the psychological test.

General office duties include: (1) arranging alphabetically and filing pencil and ink schedules, permanent record cards, 3 by 5-inch card file of pupils, grade cards and unsatisfactory report cards; (2) recording grades on grade cards and arranging for issue; (3) typing 1, 2 and 4 "F" reports and "unsatisfactory work" reports; (4) recording grades on permanent record cards and counting

points to determine "class"; (5) checking eligibility of athletes; (6) preparation of the weekly eligibility report to be mailed to competitors; (7) sorting and distributing the teachers' mail; (8) typing of general office correspondence; (9) preparing daily bulletin; (10) preparing diplomas for distribution; (11) counting and arranging of all organization supplies at the beginning of each semester; (12) preparing special reports of various kinds called for by the board of education during the school year; (13) answering the telephone; (14) making appointments for conferences with the principal; (15) interviewing visitors and referring them to the proper authority, and (16) calling pupils from classes for interviews.

Are Rural Pupils Different?

M. R. TRABUE

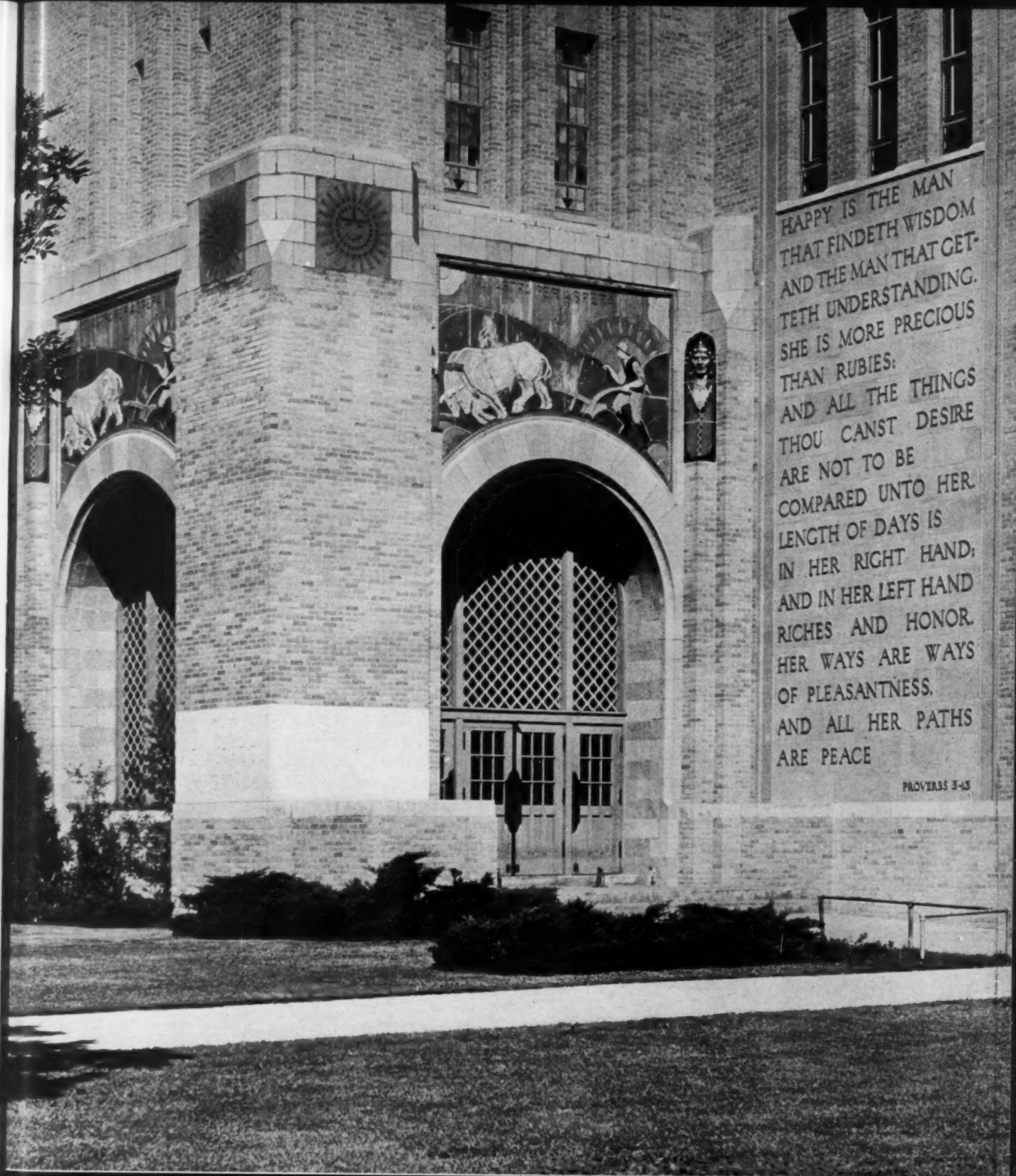
THE fundamental educational needs of rural American youths are not very different from those of their city cousins, and the methods by which these rural youths may be developed most effectively are identical with the methods by which other youth learn and make intelligent adjustments to life.

The chief differences between rural and urban youths are in the backgrounds of concrete everyday experiences they bring to the schools and in the adequacy of the educational opportunities offered them by the schools. If we are to preserve American institutions and to give equal opportunities to all American youths, we must recognize that rural and urban youths are equally in need of individual diagnosis and guidance, and that rural and urban schools both must adjust themselves to the specific educational needs of these individual young people.

It is absurd to advocate different objectives, different methods and different standards for rural and urban schools. Even in the matter of pupil backgrounds, interests and experiences, there are far greater differences among the pupils of any given school, whether urban or

rural, than between the average rural pupil and the average city pupil. With the improvements that are constantly taking place now in transportation and communication, even these differences in the experience backgrounds of typical urban and rural pupils are steadily decreasing. Every school, whether in the city or in the country, must recognize these wide differences in the equipment and backgrounds brought by the pupils and must adjust itself to the needs of the individuals.

Whether his home is in the city or in the country, an American youth has a right to expect to gain from the school a helpful understanding of himself and of his potential relationships to the life activities available to him. The primary task of the school should be to attempt to understand the pupil and the opportunities life holds for him. It is foolish to assume that because a boy lives in the country he is destined to be a farmer or that because a girl has been promoted to the high school she should now study algebra and French. The actual needs of the rural young person must be discovered before the school can intelligently adjust itself to them.



THE SCHOOL PLANT

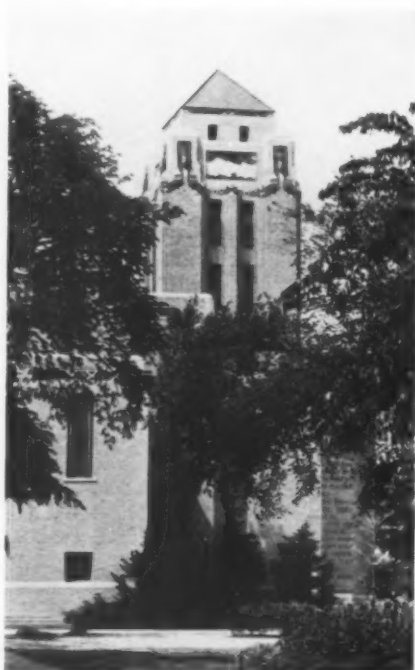
Wichita's School Beautiful

GROVER C. DOTZOUR

IN DESIGNING the Wichita High School North, which stands on the banks of the historic Little Arkansas River in Wichita, Kan., the architect made no attempt to establish a new type of architecture. But in the heart of that region where the history and lore of the Indian, the buffalo and the pioneer abound, he sought to perpetuate their memory through a decorative use of their figures in sculpture and color.

The simplicity of its lines, the seven-story tower, the rough-textured, buff brick walls, the red tile roof and the unusual decorative features combine to make it a building that stimulates local pride and enthusiasm and also arouses continued national interest.

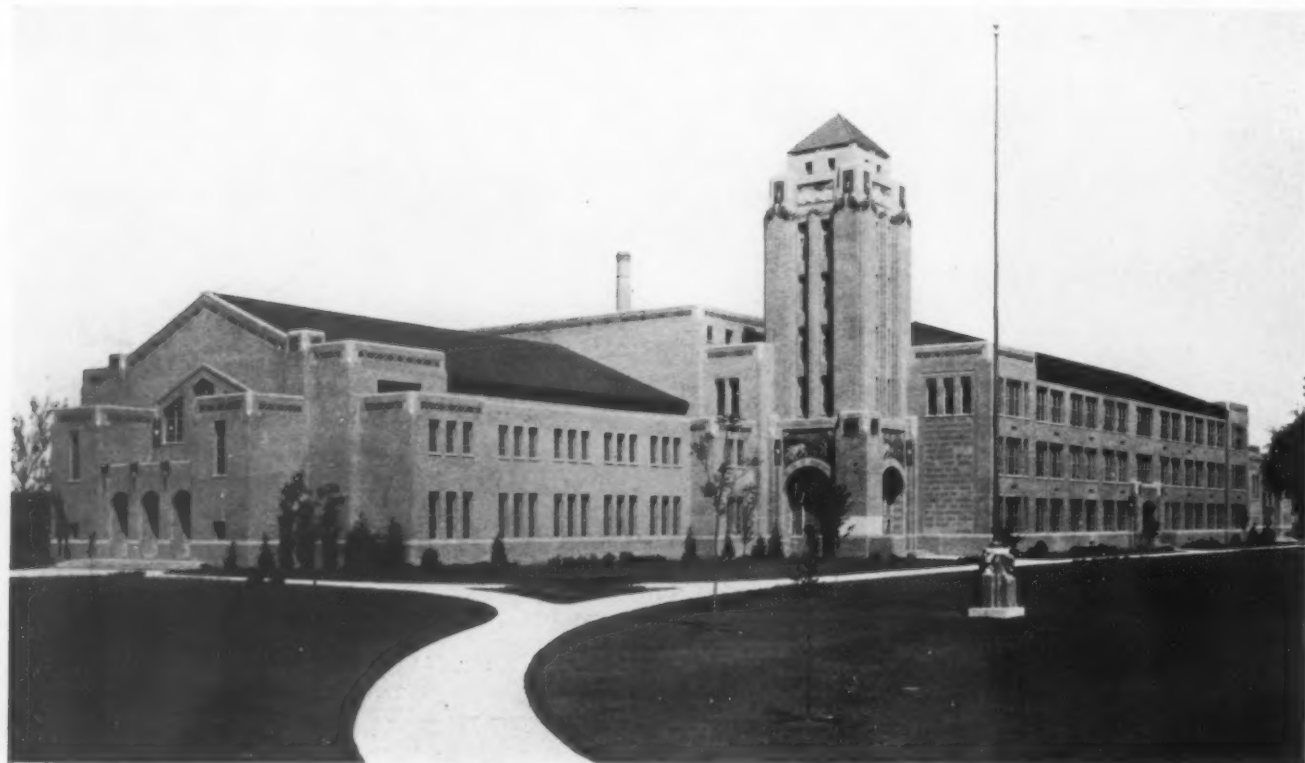
The central point of interest is the tower. In the panel above the arched entrance may be seen the pioneer ploughman with his yoke of oxen in the foreground, the setting sun and the distant hills in the background, expressive of the plodding labor and determination that were required to surmount the difficult frontier life.

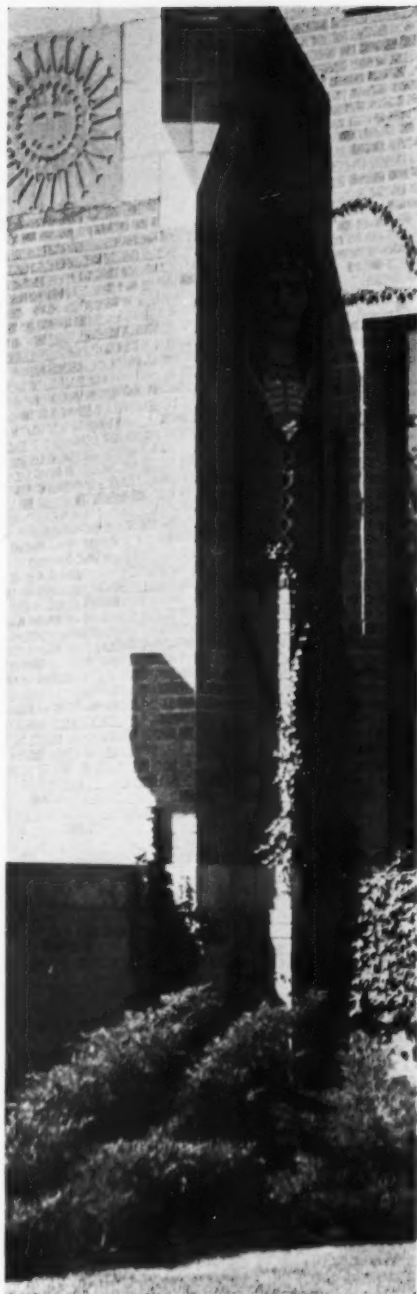


An Indian warrior has been placed in the corners near each entrance, watching with cynical expression the tedious progress of the white man. Rising above all else, atop the pylons and on all eight corners of the tower, are the Indian scout and the eagle. In watching position they seem to gaze with interest and concern on the activities of an advancing civilization. In a panel also at the top of the tower may be seen the mounted Indian hunter engaged in the hazardous task of shooting with bow and arrow the bellowing, stampeding buffalo.

At the entrance of the gymnasium and the auditorium, capping the pylons there, are buffalo heads, and at all entrances the Indian sun design, a spot of color and light, cheers those who enter or leave the building.

Central point of interest in the Wichita High School North, Wichita, Kan., is "The Tower," detail of which is shown above. Beauty of its decorative detail has won it nationwide acclaim. Effective planting adds to its beauty. The construction cost was a million and one-quarter dollars, including grounds and equipment.





The Indian warrior in terra cotta and the Indian sun design, which are a part of the decorative motif at the main entrance, add a spot of color and light.

Capping the pylons at the gymnasium entrance are buffalo heads. Above are inscribed the lines of that stately anthem, "America the Beautiful."

Workshops and music rooms occupy one wing. Below is a view of a shop devoted to woodworking.



These, in brief, constitute the chief features of decoration and symbolism in this building which have created such widespread interest both locally and nationally. The figures were made from small scale plaster models produced by Bruce Moore, a graduate of the Wichita schools, and an outstanding contemporary artist. The

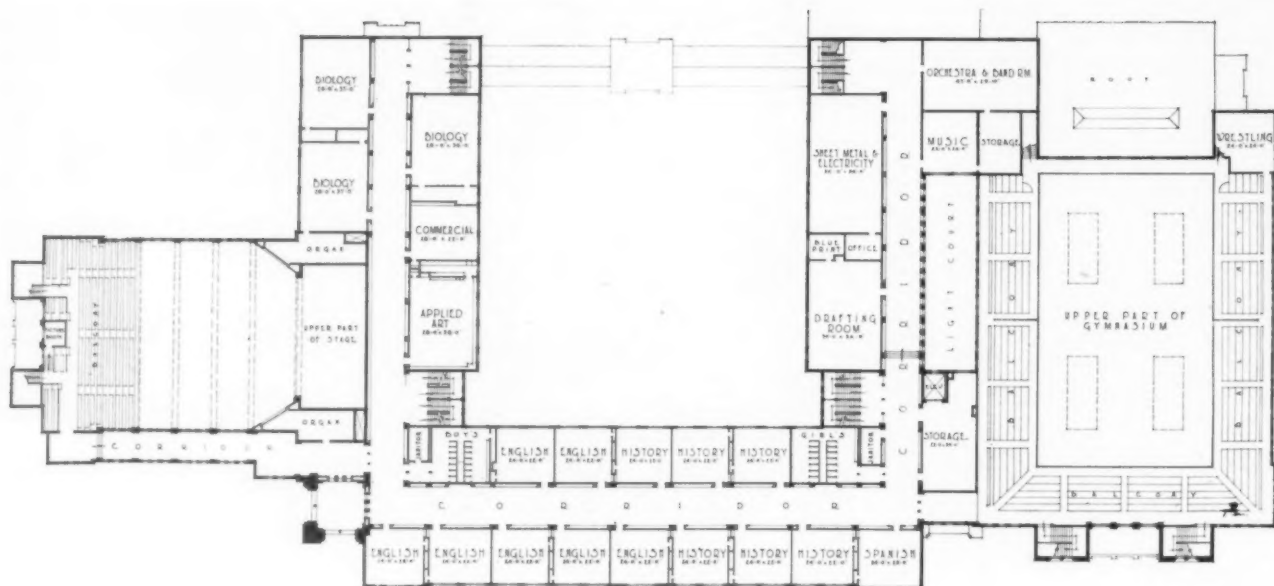
models were carefully studied in sunlight and shadow for the most desirable color effects, proportion and harmony. The final full-size figures were developed from these small models by manufacturers of terra cotta.

The school has a present enrollment of slightly more than 2000

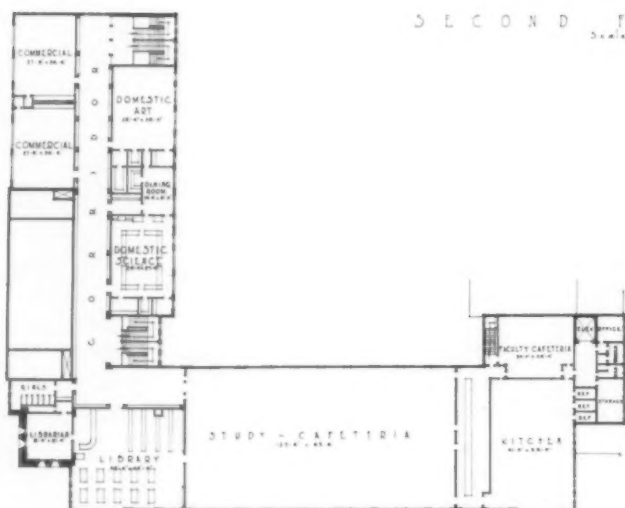
A frieze which extends entirely around the building at the top of the third story is patterned after an Indian rug design; it shows the Indian tepee, the Kansas sunflower and in silhouette against the deep blue sky, the buffalo.

Inscribed in bold letters on an exposed front adjacent to the tower and typifying the rugged faith of the pioneer is the passage from the Book of Proverbs beginning, "Happy is the man that findeth wisdom." Over the entrance to the gymnasium are inscribed the lines of the first stanza of that stately anthem so expressive of the modern American dream, "America the Beautiful."

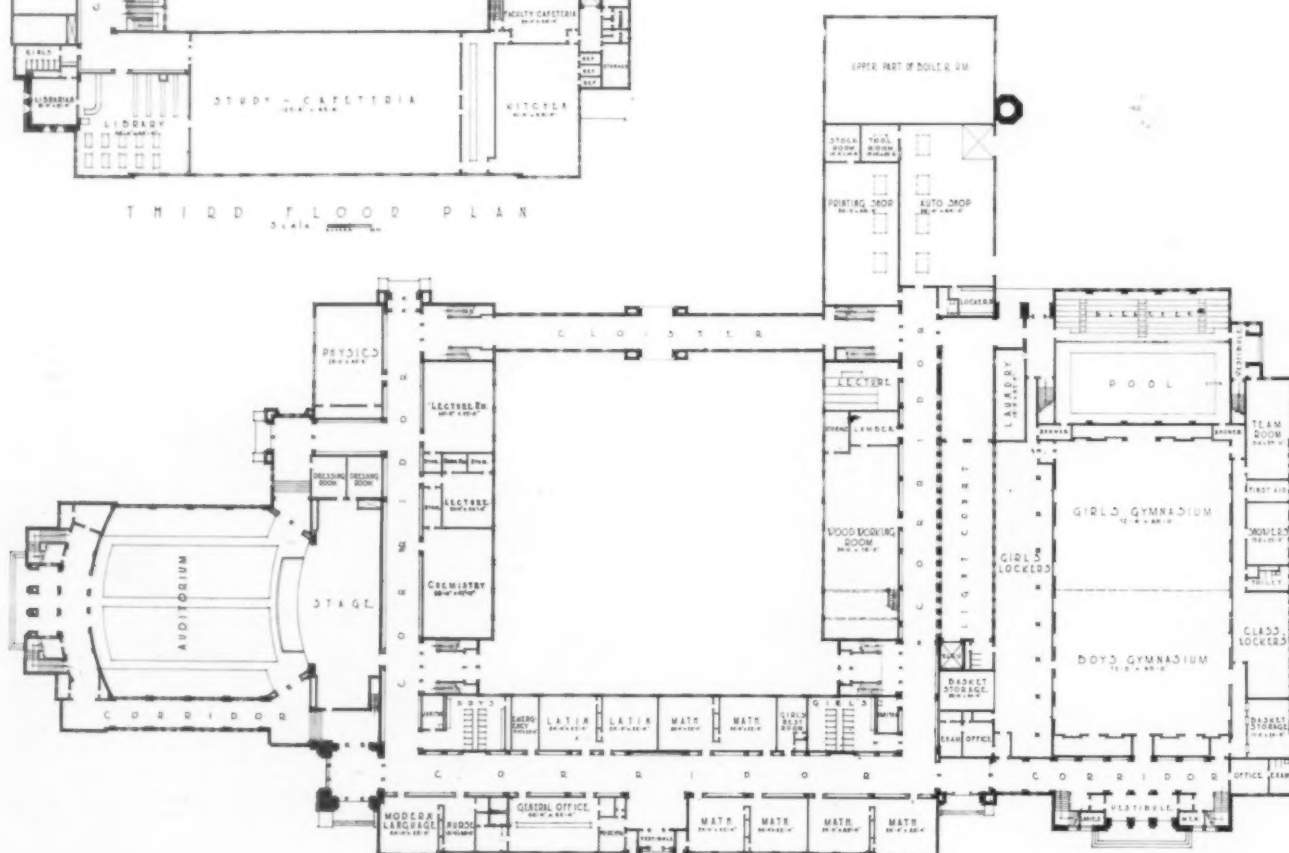




SECOND FLOOR PLAN
Scale: 1/8" = 1'-0"



THIRD FLOOR PLAN
Scale: 1/8" = 1'-0"



FIRST FLOOR PLAN
Scale: 1/8" = 1'-0"

The architectural design is that of a large "U" with the auditorium forming a wing at one side and the gymnasium at the other. A cloister joins the two sides of the "U" on the first floor level. Classrooms open off the corridors which extend the full length of the building. Glenn Thomas, Wichita, was the architect, with Lawrence W. Byers assisting.



These girls keep a battery of sewing machines humming. Fitting, dressing and locker rooms are provided. At left: The chemistry laboratory is modernly equipped, as are all other departments.

pupils, and a staff of some seventy teachers. It was completed at a cost of a million and a quarter dollars, including equipment and some fifteen acres of grounds (about \$900,000 for the building, \$200,000 for equipment and \$135,000 for grounds). For some years the board of education had foreseen the coming need of additional school facilities and without increasing its tax rate had provided a sinking fund which made it possible to build the new high school entirely on the pay-as-you-go plan.

The architectural plan is that of a large "U," adjoining one side of which is the auditorium and adjoining the other, the gymnasium. This makes it possible for each unit to be used independently at any time. The base of the "U" faces east; the wings extend westward, enclosing an open court leading down to the river. The gymnasium also faces east, while the auditorium faces south toward the new Minisa bridge, in which the decorative features of the building were carried out. This base section is 255 feet long, and is that part of the building devoted to the academic classes with the administrative offices on the first floor, twenty-three classrooms on the first and second floors, and the library, cafeteria and kitchen on the third floor.

The left or south wing of the "U" is the laboratory section containing



Cooks in the making! Tables are arranged for economy of space. A small dining room, with a pantry for practice purposes is included in the domestic science suite.

thirteen laboratory or lecture rooms for science, commerce and the arts.

The right, or north, side of the "U" is the shop and music wing. It contains eight large rooms for teaching printing, electricity, auto mechanics, woodwork, drafting, band and orchestra. To the west of this, and constituting the only basement rooms in the structure, are machinery and boiler rooms for heating, lighting and ventilating the building.

The wide corridors have special glazed tile wainscots to a height of 5½ feet, with exposed beamed concrete ceilings, painted and decorated, in classrooms, laboratories, offices, library and cafeteria. Individual steel lockers and display cases are set flush with the walls in the corridors; drinking fountains are housed in small alcoves. Heavy battleship linoleum covers all floors except in shop rooms and gymnasium, and venetian shades control the natural lighting throughout the building.

The dining room has a capacity of 700 pupils. Its arched ceiling supported only by outer walls and its wide windows offering delightful vistas of the river on one side and the main campus on the other make it one of the beauty spots of the building. Between dining room and kitchen, with solid walls on either side, is the serving room with dual equipment. This makes for quiet in the dining room, which serves as a study hall at all periods other than the lunch hour. A noiseless escalator



The physics laboratory, equipped with electricity and gas, has space for thirty pupils. In this wing are thirteen rooms for teaching science, commerce and the arts.

conveys the trays and dishes to the kitchen, which is equipped with the latest equipment units.

The library joins the dining room on the south, with the librarian's office and workrooms in the tower. The fourth and fifth floors of the tower are used for stacks and storage. The library may be entered directly from the dining room, which, as previously stated, is also the study hall of the school, as well as from the corridor in front. It is furnished with the approved library equipment.

Classrooms have built-in bookcases with glass doors, teacher's closet, dis-

play board, maximum blackboard space and sturdy desk chairs to accommodate from 30 to 35 pupils. The chemistry laboratory has desks for 28. Each desk has hot, cold and distilled water, gas and suction. Pupils have access to all chemicals, which are furnished by the board of education. The physics laboratory is equipped with desks for thirty pupils, with 12-volt D. C. current, 110-volt A. C. and D. C. currents and 220-volt A. C. current. Gas also is supplied. The home economics rooms are provided with modern equipment, including fitting, dressing and locker

Venetian blinds are used in the drafting room and throughout the building. The floor is covered with battleship linoleum. Skylights provide additional light.



rooms for the girls in clothing classes, and a small dining room, pantry and china closet for those studying foods.

The auditorium joins the south wing of the "U." It is modern with full theatrical stage, sloping floor, balcony, orchestra pit, organ loft, moving picture booth, hanging chandeliers, dressing rooms, ticket offices and wide-arched foyers. It is treated acoustically and it seats 1500.

The gymnasium, with its health and physical departments, adjoins the academic section on the north, extending westward to the north of the shop section. It has a playing space, 72 by 120 feet, seating accommodations for 2000 persons, and a tile swimming pool with ample space for spectators.

Under the balcony on the south side of the gymnasium are accommodations for the girls, including basket storage rooms, 130 individual dressing rooms, 65 showers, towel room, examination room, first aid room and offices for the girls' physical directors. Parallel appointments for the boys are provided under the balcony on the opposite side of the gymnasium. Rolling curtains divide the playing space on the main floor into two playing floors, each 60 by 72 feet.

An unusual part of the school plant for this prairie region centers in the river, which bounds the campus on the west. Bank full always, it provides facilities for canoeing, skating and other water sports which have been incorporated into the regular course of study of the physical education department.

Climaxing the year's work is the water festival held annually late in May. Featured in it are swimming races of various strokes and distances for boys and girls separately; canoe races in singles, doubles and fours likewise; life saving and novelty performances, together with band concert and a canoe parade.

Floodlights are set up and tens of thousands of citizens throng the beautiful Minisa bridge and line the banks of the river from the time the festival begins at the close of the school day until the last canoe passes.

Minisa bridge is an integral part of this civic center, and at the request of the pupils was named to honor Dean Thurlow Lieurance of the Municipal University of Wichita.

Plants Complete the Picture

J. WARREN AYER



An example of restrained, well-balanced planting, economical to maintain and acceptable in appearance.

IF YOU are one who can recall the childhood experience of returning to the stubble-studded country school yard in September, just shorn of its summer growth of woody fibered weeds, you can visualize the ugliness and hazards caused by inadequate care and dearth of planting. Even now hundreds of unplanned, unkempt and unplanted school grounds throughout the nation bear mute witness to the absolute failure of communities to make use of a situation at hand for teaching the appreciation of beauty and orderliness, and for raising the esthetic standards of the community.

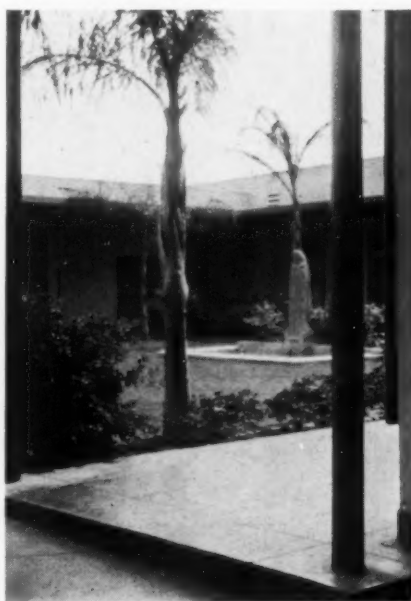
Some reasons for the planning and planting of school sites are clearly implied in the preceding paragraph. More definitely they are:

1. The wholesome and stimulating effect upon visitors, teaching and caretaking personnel, and particularly upon pupils. While it is difficult to measure, no one can doubt the value of the sense of well-being and esthetic satisfaction arising from working and playing amid the orderly and beautiful surroundings produced by landscaped grounds.

2. Probably no other single criterion is of more significance in the evaluation of any vicinity than the character and appearance of its public school plants. The setting up and maintenance of attractive grounds and facilities will stimulate the layman's interest in education.

3. Instructional values are also of prime significance. The school yard

Palms and shrubbery in this patio make a foil for the terra cotta fountain.



may become a laboratory for first-hand study of trees, shrubs, flowers, birds and insect life found there.

The procedure of landscaping will necessarily depend upon a number of factors, such as the present condition of buildings and grounds, soil and climate, funds and availability of suitable plants. If the site is already inadequately or unsuitably planted, a survey should be made by persons on the staff best qualified to draw up a complete plan for planting and landscaping.

A good start may be made by observing near-by satisfactorily treated sites, by studying pictures showing satisfactory arrangements, by obtaining books and magazines dealing with the subject and by consultation with local nurserymen. These suggestions apply particularly to smaller districts in which expert consultation is beyond the resources of the schools, and in which the problems of landscaping are not so intricate as to baffle the layman.

If a new building has just been completed, or is under construction, the architect should be required to assist the superintendent and the school board in planning the whole site. All school architects have access to literature bearing upon landscaping. If an important building or



The wire fence enclosing this kindergarten playground is entirely concealed with a growth of shrubs.



An exotic setting of palms, bougainvillea, dark green shrubbery and a fountain built largely by pupils makes this school in southern California distinctive.



Wide lawns, evergreens and a clipped hedge fit this school gracefully into a residential district.

group of buildings exists or is contemplated, adequate planning of surroundings will justify the employment of an expert landscape artist and engineer to serve in an advisory capacity. Inability to obtain the services of such a person need not, however, discourage school people in the improvement of the school site.

Should a complete job of planting or replanting be contemplated, it is usually advisable to purchase stock and have the planting done by a responsible nurseryman.

The essential points, then, in the methods of procedure are: (1) take advantage of all available information and advice; (2) visualize and sketch a definite plan toward which to work and plan the growth of plants; (3) obtain good plants from a person qualified to guarantee their

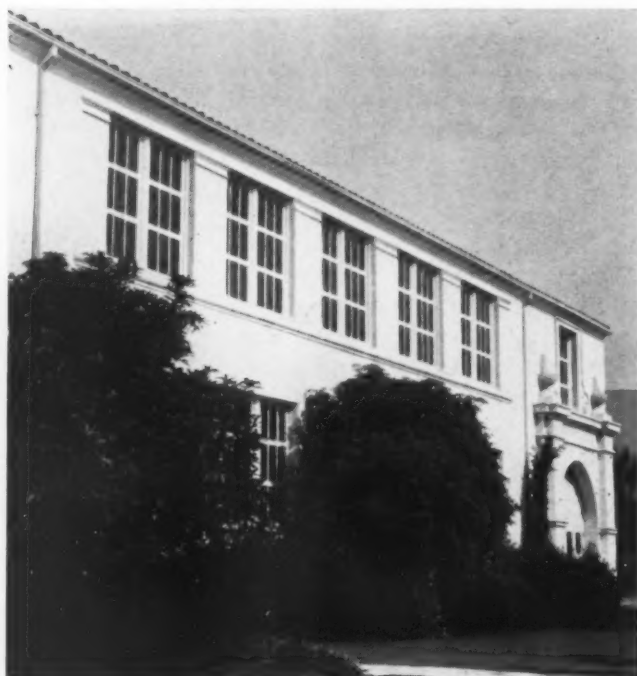
An attractive combination of luxuriant foliage with cream colored walls, but becoming so high and dense as to interfere with the lighting of some rooms in this school.

successful growth under proper care.

Observation of the surroundings of public and private buildings often reveals incongruity. Plantings may conceal the characteristically beautiful architectural lines of structures and reveal and emphasize the drab and ugly features. Slender towering Lombardy poplars and Italian cypresses may be found in close proximity to buildings already too squat and flat in appearance; balance and pruning may be so prim as to be painful, or a helter-skelter intermingling of foliage and flowers may engender a sense of confusion. The only satisfactory basis of selection and distribution is a careful study of the landscaping and the buildings which constitute the backdrop and main features of the setting.

By the selection of a large number of native plants and trees, their successful growth may be reasonably assured, whereas imported varieties, while interesting, may be expensive or impossible to maintain. A little study should reveal a sufficient number of plants suited to each locality. Since conditions vary greatly throughout the country, the listing of varieties and names is impossible.

Ordinarily plants will grow satisfactorily if they are transplanted when comparatively young. This presents the problem of a long period of sparse vegetation, or overplanting to give an immediate effect with

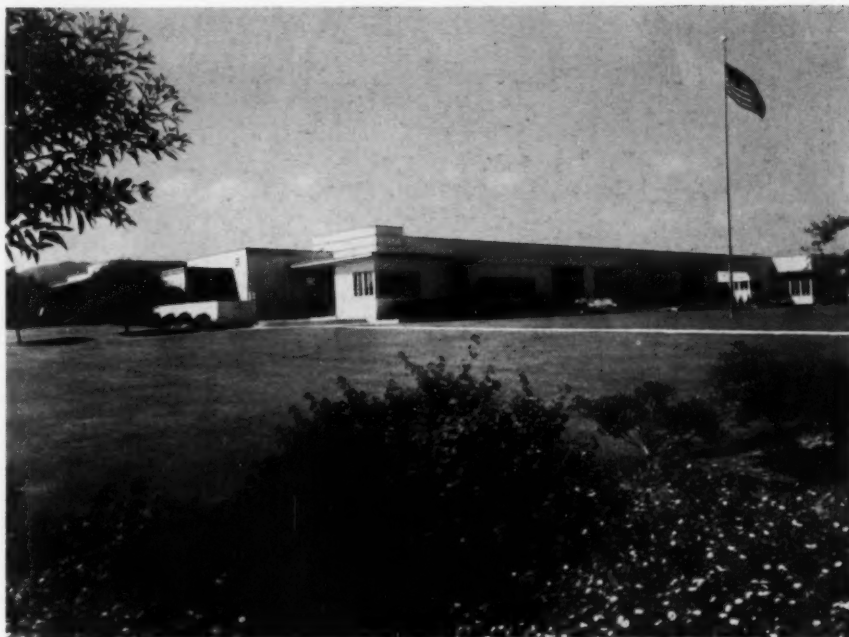


thinning later on. The cost of overplanting and the injurious effects of crowding on the plants selected to remain make the practice inadvisable. It is far better to restrain foliage for a few years or even to interplant for a few seasons with attractive annuals.

Landscaping should be arranged to produce the best year-round average effect. Even in such climates as the California coastal areas in which plants and flowers remain attractive throughout the winter, there is enough diversity to produce desirable periods of particular loveliness at certain seasons of the year, but definite planning is necessary for attractiveness through the less interesting periods. There are few regions in the United States in which some species of ornamental evergreens will not flourish. The bleakness of winter surroundings may be diminished by at least a few trees and shrubs of this type.

In the planting of flowers, plants that produce only a short spurt of blossoms, followed by drab weedy appearance, are to be avoided. If adequate care is available, it is possible, by interplanting and selection, to maintain reasonably constant floral attractiveness from early spring to late autumn. However, the continuous planning and exacting care required usually defeat any attempts to obtain such an outcome.

While a reasonable expenditure of money for the beautification of school grounds is justifiable, consideration



An example of planting arranged to give a remarkable sense of roominess and freedom, with a broad sweep of lawn to enhance the horizontal line of the building.

of the cost is an important factor. In the interest of economy a few suggestions are listed, some of which have been made in other connections.

These are: (1) avoid overplanting; (2) use trees and shrubs generously; (3) preserve open expanses of lawn free from shrubs and flowers so as to facilitate care and mowing; (4) use a large proportion of native plants because they are both cheaper

to buy and less difficult to maintain; (5) use plants that will thrive in the particular type of soil found on the site; (6) place a definite limitation upon the number of flowers and mass those used about entrances and other places where color is important, and (7) when practicable, use shrubs bearing bright colored berries or brilliant flowers to obtain whatever color effects are desired.



Above: Building, site and planting are in perfect harmony. The terraced lawn sets off the low planting near the building and the evergreen at the right balances the modernistic tower. Left: A satisfactory treatment of a building with a short foreground of lawn and an excessive number of windows.

Let's



Left: This type of guard rail has been found to be necessary where a main school exit discharges directly into vehicular traffic. The posts are 4-inch pipe filled with concrete and the rails are made of 2-inch standard weight pipe.



From a safety standpoint, much thought has been given to stairways suitable for schools. The early type of stairs shown at the left still exists in many of the older schools of the country. The runs are excessively long, the whole is built of wood and usually a storage cupboard is located beneath the bottom run.



Right: This stairway came into vogue about 1890 and spread like a plague throughout many of the city schools built in that period. Above: A more elaborate example of the same vintage. It lacks all the essentials of safety.



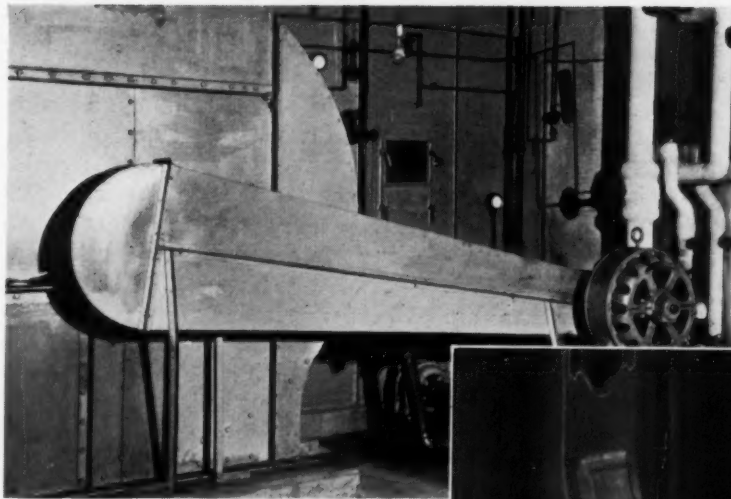
Play Safe!

C. L. WOOLDRIDGE

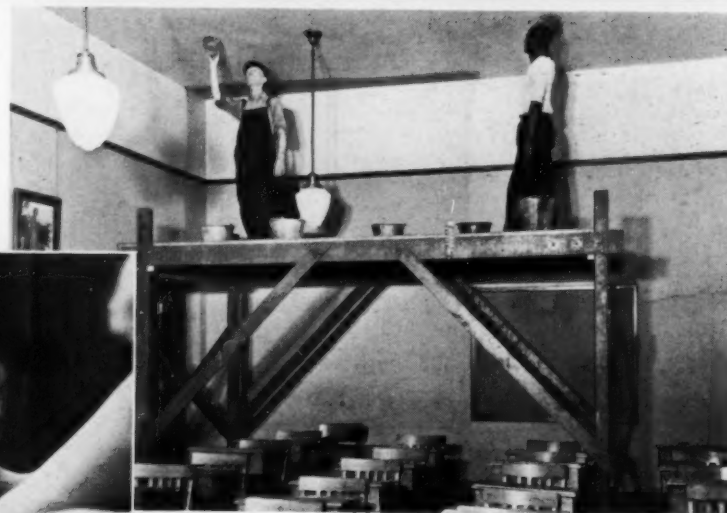
ALTHOUGH the gas explosion in Texas occurred a comparatively short time ago, how many school people today are using the simplest means of ensuring that a similar explosion will not take place in their own buildings? Yet all that is necessary is to close every gas outlet in the building and then see if the meter is passing any gas. If it is

Opposite page: With the introduction of fireproof materials in stairways it has been necessary to work out many problems. When cast iron, steel or slate were used for the treads it was found they would not resist wear and became dangerously slippery. The stairs shown at the left are made of burned tile. It resists wear well, and the worn parts can easily be replaced.

Below: Not all panic bolts allow enough clearance. Often a pupil may receive a badly crushed finger as a result of lack of clearance when the bar is depressed. Note how the small boy's finger is caught between the bar and the casing of the mechanism. Opposite page: This illustrates another hazard due to lack of clearance. Here the finger is caught between the window muntin and the bar. A properly designed panic bolt is shown at the right above.



Above: A good type of fan belt guard for the protection of the janitor or engineer. Safety measures are always necessary at points like this.



Above: A safety type of cleaning scaffold. It is mounted on ball bearing casters and is adjustable so as to clear furniture. The platform is 5 feet wide by 10 feet long, providing ample working room. In six minutes the scaffold may be dismantled, moved to another room, and re-erected. The old type of cleaning scaffold still in use in many schools is shown above.

passing any gas, there is a leak that should be located and repaired. How many take this simple precaution at least once a month?

When it is considered that five fires occur in school buildings every day in the year it is not to be wondered at that we are prone to think of school safety in terms of the hazards of fire, panic or explosion. We do not stop to think that there are more school children killed and in-

The standard spiral type of fire escape below is used in many schools throughout the country. The location of this one is bad because it discharges into a closed court, making it necessary to re-enter the basement before exit is possible. The platforms on the floor levels are above and pass open windows. The spiral fire escape is satisfactory, although it is certainly not the safest or best type for small children.

jured every year in scattered everyday accidents than in the three disasters just mentioned. Very few regard school safety in a really comprehensive way. It is certainly desirable to guard against the major disasters, but it is just as important to give constant attention to the ever occurring every day accident.

Several years ago, the school authorities in a large city took pride in the thought that they had the safest school buildings in the entire country. They had equipped all of their old buildings with modern fire escapes; they had installed thousands of panic bolts on exit doors; more than 10 per cent of all the automatically sprinkled school buildings in the United States were located in this city; they had installed in most of their buildings modern fire alarm systems; they thought they had fireproofed all of their boiler rooms;

they thought they had developed their housekeeping to the point where it was impossible to have trouble on account of the accumulation of papers and discarded equipment.

In 1932, the board provided the money for and authorized a com-

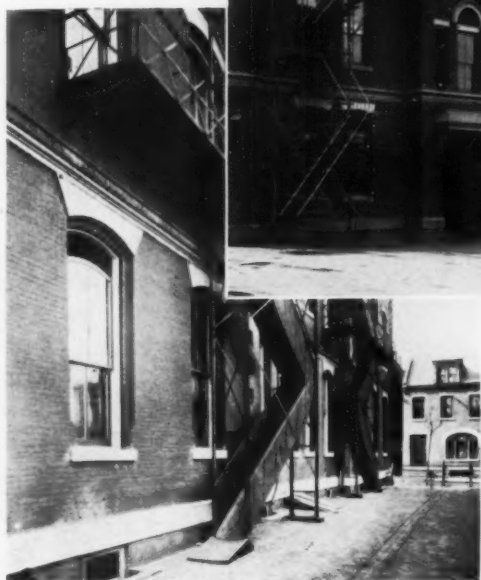
The fire escape below violates every principle of safe design. Pupils have to clamber over window sills to reach the platforms and the line of escape is above and passes many open windows. The balustrade is flimsy and if it failed the pupils would be precipitated on top of a sharp picket fence. Electric light wires are an additional hazard.



Below: Guards about this fire escape landing prevent injuries on the playground, yet give access beneath for cleaning.



The building at the left is fireproof, with but one stairway. Pupils prefer to use the fire escapes in going to and from their classrooms and thus are familiar with the fire escapes as exits.



The "spider web" type of fire escape above is wholly undesirable. From a structural standpoint all factors of safety are lacking.

Above is probably the grandfather of all the chute types of fire escapes and illustrates a fine example of poor judgment on the part of the school board. If a pupil made the initial run on his seat, the second must, of necessity, have been accomplished on his stomach. The first and only fire drill over this device resulted in an ambulance ride for most of the pupils. It was never used again.

plete safety survey of their entire school plant. This safety survey quickly disclosed that the human or personal equation constitutes the most dangerous hazard and, because this had been neglected, their schools were really in a hazardous condition.

In one large nonfireproof school containing four splendid fire towers, they found the exit of one tower completely blocked by its use as a tool and lumber storage room for the manual training department. The panic bolt on this exit was rendered inoperative by a chain and padlock, with the only key in the custody of the manual training instructor.

The exit door to a second fire tower was badly jammed and gave

every evidence that it had not been opened for many months. When it was finally forced open, it was found that the exit discharged into a small court yard with a high steel fence containing a locked gate which was not unlocked during school hours. In other words, 50 per cent of the safety exits provided by the board in this school were rendered useless and evidently had not been used in fire drill for many months.

In a second case, two emergency exits from a school auditorium had chains and padlocks on the panic bolts and the rusty condition of these padlocks indicated that they had not been opened for many months.

Throughout the schools it was found to be a general practice to keep the steel fire doors between the boiler room and the corridor wide open. If such doors were equipped with automatic closers,

such devices were usually rendered inoperative by wedges or hooks.

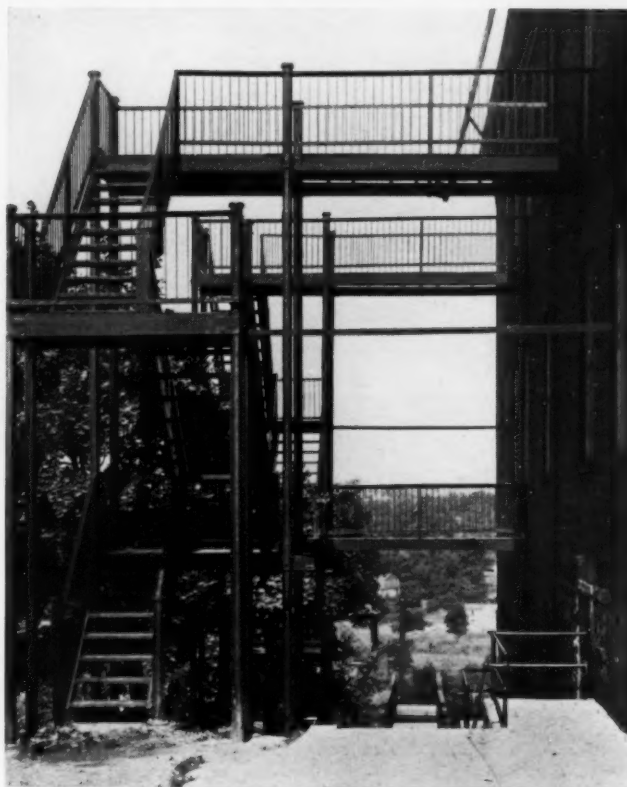
The board had installed adequate and costly belt guards on all the motor-driven ventilating fans. In many cases those guards were dismantled and were not in use and, in fact, some of them were lost entirely.

In a large majority of the schools it was found that the circuits on the panelboards in the wiring system were badly overfused, thus deliberately introducing a fire hazard.

In school shops, cartridge fuses were in use with a piece of copper wire soldered between the brass ends. In other cases, wire nails were concealed behind the fuses, which rendered the fuse protection useless.

These concrete instances are only typical illustrations of what is meant by the personal equation hazard. The principal, the teachers, the jan-

Below is a first-class type of fire escape. Discharge platforms are at floor level, the pupils passing from the classroom through a door protected with panic bolts. The floor of the bridge to the stairs is constructed of solid checker plate.



No flames from lower windows may reach pupils crossing the bridge. Openings in the treads of the steps are too small to catch a high-heeled shoe. The bottom of the escape is located so that pupils may quickly get away from the building. There are no places inaccessible for painting.

itor, the district custodian or any employee of the board in contact with these conditions had failed to recognize his responsibility in the simplest form of commonsense safety. In fact, in many cases apparently they had intentionally removed a safeguard provided by the board.

Altogether, this safety survey developed a total of 5,540 safety haz-



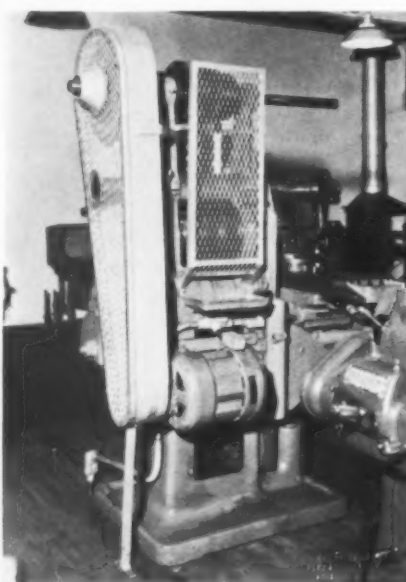
A moot question in schools is the best type of eye guard for the grinders. The type of guard illustrated above has proved satisfactory. A small quadrangle of wire-inserted plate glass is bolted on the grinder in such a position as to protect the eyes without obscuring the vision. Goggles are then not needed.



The homemade belt guard above is satisfactory. At left: One method of protecting a wooden floor at a forge. Concrete floors are not desirable in general shops and checker plates may be used to advantage in protecting the wood floor.



This power panel in a machine shop is so wired that, if the power fails, no machine can be restarted until the instructor throws a switch for each machine, an important safety measure.



ards which the board had previously failed to recognize. This was in a city of about 600,000 population. Probably similar safety surveys in most school districts would disclose equal or worse conditions.

As a result of this safety survey, this school district now employs a full-time safety engineer. It has developed a system of monthly inspections which does not bog down into a useless gesture. It has greatly improved the quality of the fire drills. It has made a program spread over several years to eliminate the most costly hazards. It has placed its pupil safety patrol under a competent, experienced officer and, most important of all, it has developed and is developing a consciousness of safety on the parts of the pupils, the teaching force and the public generally.

Comprehensive school safety may be embraced in three rules:

1. Make your school building as automatically safe as is possible. The words "automatically safe" include panic bolts, doors swung the right way, direct circulation to exits and self-closing doors where needed.

2. Take the necessary measures to ensure that the personal equation hazard is kept at a minimum.

3. Take the necessary measures to ensure that safety consciousness is kept constantly alive in the minds of the pupils, the teaching and janitorial staff and, especially, the general public.

A Count on Coal

JOHN B. HIGH

WITH limited sources of revenue it becomes essential to keep fuel costs as low as possible and still give that service which will promote the greatest good to all who use school buildings. With the present philosophy of education, plus the demands of the public, school buildings are finding greater use than heretofore, especially in evening and night service. In Ann Arbor, Mich., for example, fuel expense represents 20.7 per cent of the operation total and 2.1 per cent of the entire general expense budget, less debt service.

Coal can be classified into different kinds from anthracite to cannel and lignite. In general all types of coal, other than bituminous and semibituminous, can be discarded as steam coals.

In studying coal and heat values, the analysis generally used is the proximate analysis and consists of determining the percentage of moisture, volatile matter, fixed carbon, ash, sulphur and phosphorus in the sample, together with the heat value expressed in British thermal units. Outside of the determination of sulphur, the analysis is mechanical in its nature.

Moisture Is Waste Product

Moisture or water in coal may be classed under two heads: surface and hygroscopic. Surface moisture may or may not be present, and if present it may be in varying quantities. Hygroscopic moisture is that which is retained within the pores of the coal by capillary attraction and cannot be isolated except through the application of heat. This moisture is the moisture referred to in any analysis. Moisture is a waste product and has no heat value in itself. In fact, it requires heat to vaporize it. Ordinarily, the coal containing the least amount of moisture has the greatest heating value.

The volatile matter consists of combustible gases such as hydrogen, car-

bon monoxide and certain hydrocarbons. For our purposes it may be known as that part of the coal given off when the coal is subjected to heat. This gas, when supplied with the proper amounts of air, burns readily and produces heat. Fixed carbon represents in a loose way that which remains after the volatile matter, ash and moisture are determined. It does not represent all of the carbon in the coal since some of that is combined with the hydrogen and is driven off with the volatile matter.

Ash Has No Fuel Value

Ash represents the solid combustible mineral impurities that are left after the coal is burned. It comes from the mineral matter in the original vegetation and in the rock, shale, clay and other impurities in the partings in the coal or in the roof or floor of the mine itself. The impurities in the original vegetation cannot be eliminated, but those from the mines can be reduced by careful mining and picking before shipping. Ash has no fuel value whatsoever and is just so much useless material upon which freight, unloading and cartage costs must be paid. High ash coals mean more labor in the furnace room and a higher fuel cost in general.

Sulphur is present in coal in varying quantities and in combination with iron, calcium and organic matter. It has some heat value. As pyrites, it is objectional since, in the breaking up of the compound, the sulphur passes off as gas, causing discoloration in buildings in the vicinity of the plant. The iron remaining oxidizes and readily combines with other impurities to form clinkers. Phosphorus is present also, but in such small quantities that it does not affect the use of the coal in an ordinary furnace.

The heat value of the coal is expressed in terms of British thermal

units. The Btu. represents that amount of heat that is required to raise 1 pound of water at 62° F. through one degree of temperature. The heat value of coal is brought about by the oxidation of the carbon, hydrogen and the unoxidized forms of sulphur and iron.

The fusion point temperature of the ash is also important since it affects the formation of clinkers in the fire box. An ash with a high fusion point will not be clinkered in any ordinary fire box condition. A somewhat lower fusion point will result in a spongy and porous clinker. A fusion point around 2100° or less will cause the ash to melt readily and to form a slag some degrees above its melting point.

In the Ann Arbor schools there are three types of heating boilers: down draft smokeless cast iron, regular sectional cast iron and steel horizontal return tubular. Some are hand fired and others have stokers attached. Experiments are now being made with a coal burner that is hand fired, having a forced draft produced by a motor-driven fan regulated as to operation by steam pressure through a steam stat. A high volatile bituminous egg coal is being burned in the down draft boiler, a low volatile run of mine semibituminous coal in the cast iron boilers and a high volatile bituminous nut, pea and slack in the stoker-fired boilers.

Experiment With Coals

In the past coal was purchased on a low bid basis. Sometimes results from the coal furnished were good, but more often there were difficulties. The coal varied from year to year. In consequence the engineer and firemen had to change their methods of firing from time to time to suit the coal purchased. More uniformity was needed, so experiments were started with different coals.

This was accomplished with the cooperation of the dealers who had contracted to furnish the coal. The services of the university also were used, and through the courtesy of

the professional men and the officers of the maintenance and operation department, much was learned of what they had obtained in their research work and in the boiler plant.

Our engineer and firemen were advised of the experiment and wholeheartedly entered into the game. Whenever a new coal was brought in they were asked to give the results as they saw them when they fired the coal, in terms of comparison with other coals used before. Was the ash content larger or smaller? Did it clinker more or less? Was the clinker solid or open? Did it burn as readily? Was its heat value greater or less?

High-Grade Coal Pays

This experimentation extended over several years during which period a close check was kept on all plants in which new coal was being used. As a result, it was found that it pays to purchase a high-grade coal of the proper type to fit the needs of the individual heating plants. Especially in plants that had stokers, it was discovered that different kinds or types of stokers would operate more effectively if supplied with coal that was suited to the type of stoker.

It is also profitable to run a boiler efficiency test occasionally to find out just how well the system is operating and what may be done to bring about more economical operation. Several years ago a test was run in the heating system of one of the larger schools; a power plant engineering firm was employed to make the test. It consisted of metering the boiler feed water, weighing the coal and ashes, metering the return water to determine the evaporation, analyzing the flue gases and taking the flue gas temperatures. An analysis of the coal used and of the combustible in the ash also was made.

In this plant, under ordinary conditions, two boilers were fired together, since by doing so, it did not take as much attention on the part of the fireman as the firing of one boiler since both boilers could be operated on a more or less semi-banked basis.

In all of Ann Arbor's plants, with the exception of the senior high school, firemen are assigned to janitor service as a part of their tasks

and for that reason are required to be away from the boiler room for half an hour or more at a time. The test was run for four consecutive days. The first test was made with two boilers generating steam; the second test, with one boiler. These tests showed specifically that the operation of one boiler took less coal than the operation of two. The outside temperature, during the one-boiler test averaged 10.1° below zero and 10.8° above zero during the two-boiler test. Thirty-nine per cent more steam was generated during the one-boiler test than during the two, with the burning of but 8½ per cent more coal. During this one-boiler test, the fireman was required to be in attendance in the boiler room practically all of the time to adjust the ash pit doors and to stack the damper for the proper draft to keep the boiler pressure at a desired point and to feed the measured coal.

The engineers estimated that approximately 30 tons of coal could be saved a year if an automatic damper and ash pit door control were installed to keep the steam pressure constant by opening and closing the stack damper and ash pit doors as the steam pressure varied. This would necessitate attendants' caring only for the fuel bed. Nothing was done, as the installation of a stoker was contemplated. Later a stoker was installed and since then a single boiler has provided the steam to heat and ventilate the building, permitting the fireman a good amount of time for janitor service. The average tonnage during the eight-year hand-fired period was 266, while for the last three years, the average has been 230 tons, a saving of 36 tons.

Equipment Costs Repaid

An initial expenditure of \$100 for a flue gas analysis set, several draft and pressure gauges and a flue gas thermometer has been repaid by the savings that have come through the use of these instruments. The tests are made off and on without notice to the firemen. They are asked to fire just as they ordinarily do. It has been possible to recommend little changes in methods which have meant less coal used.

In one instance, it was felt that the stokers in a building should give

better results over hand firing than the coal consumption records were showing. In fact, the tonnage used was equal to that of a four-year hand-fired period. Several days were spent in this boiler room testing flue gases, keeping stack temperatures and changing fire box drafts and wind box pressures. It was found that a great amount of excess air was coming through and was blowing holes in the fuel bed; also that if the air holes in the bank were closed from time to time, it was possible to keep an average CO₂ content of 12 per cent instead of from 5 to 7 per cent as before. As a result, coal consumption has dropped from an average of 667 tons per year to 553 tons, a saving of 114 tons. The practice of weighing the coal used is productive of care in firing.

Designate Coal Wanted

A number of queries have been received concerning our coal purchasing policy. During the N.R.A. the price of coal was definitely fixed by law and the local concerns, under its administration, were no longer permitted to low bid on any contract. No matter who quoted, the price was the same; mine price plus freight plus margin. Prior to this time we awarded our coal by low bid after bids had been made and tabulated. Because of size and facilities for unloading efficiently, all firms but two or three were out of competition. About this time it was decided we would designate by kind and mine just what was wanted, our determination being the outcome of our investigations.

The board of education then proposed to the local dealers that coal be bought directly from the sales agency or mine, we paying for the tonnage and freight and having the coal shipped in care of local dealers to be delivered in our bins by them. We also proposed to pay them a reasonable margin over and above the actual cost of hauling for their time and trouble in receiving, weighing and delivering the coal. Every dealer was given a chance to participate in the delivery of coal.

The proposal was accepted by every local dealer and for the last three years coal has been purchased on an equitable basis.

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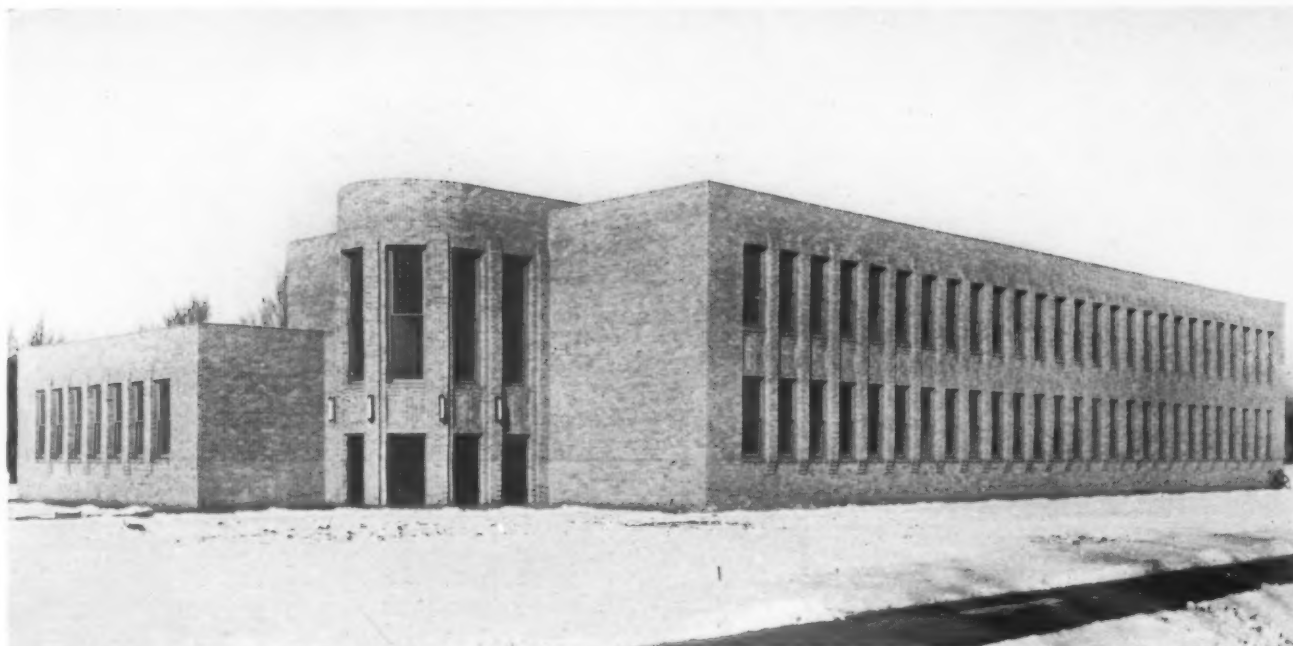
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Fruita Builds Anew

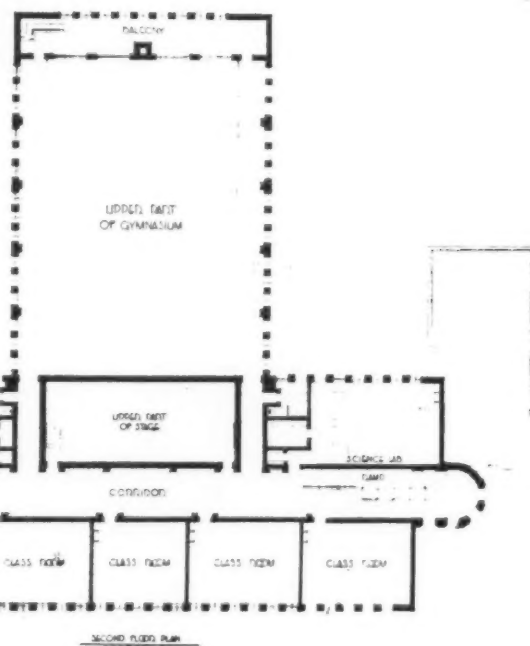
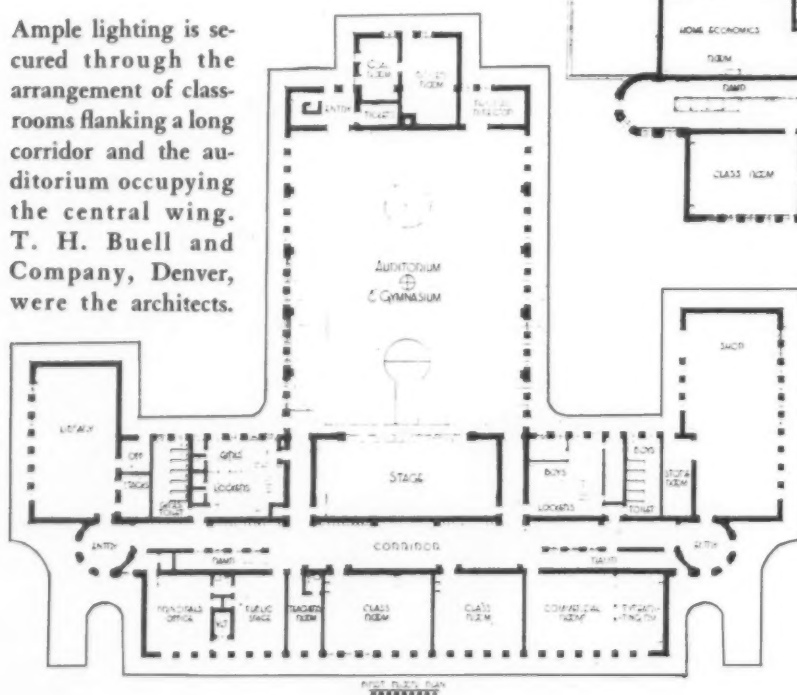
R. L. JORDAN

ON THE western slope of the Rocky Mountains at the edge of a wide level valley lies Fruita, Colo. This little community derives its name from the fine varieties of its peaches and pears.

When the old school burned, the board realized the advisability and

Fruita Union High School, Fruita, Colo., was erected at a cost of \$133,451 or 27 and $\frac{3}{4}$ cents per cubic foot. An additional \$10,213 was spent for equipment and \$14,243 more for land and other miscellaneous expenses. Total cost was \$157,907.

Ample lighting is secured through the arrangement of classrooms flanking a long corridor and the auditorium occupying the central wing. T. H. Buell and Company, Denver, were the architects.



economy of striving toward the most modern developments in arrangement, materials and equipment for the new school plant, although the success of an adequate bond issue was still uncertain. The bond issue was carried, however, and the Fruita Union High School became a reality. With accommodations for approximately 350 as required in the future, it now serves a consolidated district extending over a large territory, and its 270 pupils are gathered

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by bus from the outlying areas.

The former school site was abandoned and the new building stands 60 feet back from the street front, facing east on a plot of 595 feet by 290 feet, with ample room for an adjacent athletic field. The front portion is 152 feet long by 49 feet deep, with a center wing, 64 by 94 feet, at the rear which contains the combination gymnasium and auditorium. At one end of the front section is the one-story shop, and at the other, the library.

Light brick in a modern horizontal design of simple yet interesting treatment forms the exterior of the building. Balanced form and pleasing lines, rather than elaborate detail, were chosen to reflect the simple and sturdy character of the particular location. No material

other than brick was used for decorative treatment of the exterior.

The building contains a science laboratory, home economics room, library, manual training shop, combined gymnasium and auditorium and eight classrooms, besides the necessary offices and shower rooms. An entrance is located at each end of the front portion, opening into circular vestibules which are connected by a corridor.

A particularly interesting feature is the use of ramps between the first and second floors in place of the usual stairs. These occur at each end of the corridor with a 2.2-inch rise per foot of run; they have proved to be an efficient and easy method of travel.

Corridor walls are faced with light pressed brick; recessed into these are

159 lockers, 15 by 12 inches, each for the use of two pupils. The ceilings are insulated to deaden the sound, and the floors are covered with composition flooring which continues up the ramps.

All classrooms have an east exposure with ample window area on one side only. Each classroom contains a bookcase and teacher's closet. The floors are of maple and the windows provided with venetian blinds.

The chemistry and physics laboratory on the second floor is equipped with modern laboratory tables to accommodate twenty-four pupils, each table having water, gas and electric outlets, rendering it suitable for any high school experimental requirements.

The home economics classroom, also on the second floor, is equipped with electric ranges, ovens and sinks to accommodate thirty-two pupils. In addition, it contains ample cupboard and storage space as well as a dumbwaiter which travels to the floor below for serving in the gymnasium during student gatherings.

At the south end of the building in the one-story wing the library, which is large enough comfortably to seat forty-eight persons, is located. Built-in book shelves are provided and connecting with it are stack room and librarian's office. The library is accessible from the exterior, thereby providing reading facilities for the public when the main portion of the school is closed. The ceiling is acoustically treated and the floors are covered with composition flooring. The shelves have a capacity for approximately 5000 volumes.

At the north end of the building in a one-story wing is the manual training shop. This wing balances the other in which the library is found, and is fully equipped. A lumber storage room is provided.

In planning the gymnasium, it was necessary to incorporate the requirements for auditorium usage. The clear floor space is 50 by 82 feet with permanent bleachers, which hold 270 persons, on each side. A balcony at the rear seats 50 persons, and similar units along each side seat 90 each, making a total seating capacity of 500 for gymnasium games. When used as an auditorium,



Ramps, instead of stairs at each end of the corridor have a grade of 2.2 inches per foot of run. Recessed into the corridor walls are 159 student lockers, 15 by 12 inches, each locker for the use of two students. The ceilings are insulated.



The combined auditorium and gymnasium seats 500 persons for games. When it is arranged for auditorium purposes, it seats 950. The clear floor space measures 50 by 82 feet, and has permanent bleachers at the sides for 270.

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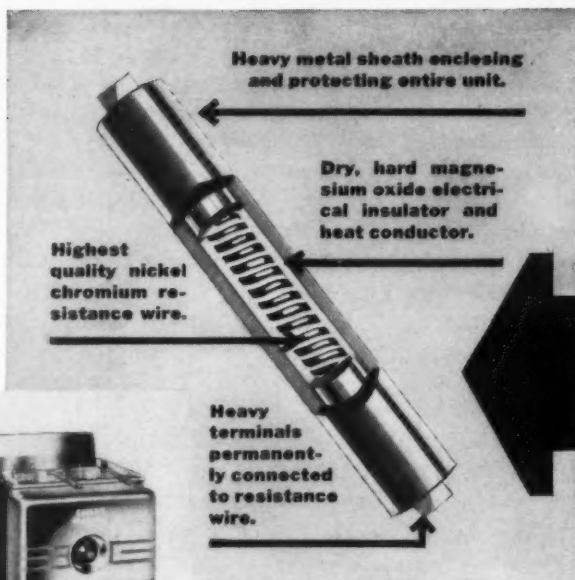
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an additional 450 folding chairs can be placed on the main floor, making a seating capacity for theatricals of 950. Side balconies are cantilevered from the wall, thereby requiring no obstructing columns or hangers.

This room is so located that it may be closed off from the remainder of the school during night games or theatricals, an outside entrance and ticket office being provided. At the rear of the gymnasium is an office for the physical director.

Auditorium walls are faced with brick in a decorative treatment, and the ceiling is covered with standard insulation board, serving the double purpose of acoustical treatment and insulation. Steel arch trusses support the roof, with steel columns extending to the foundation, the high point of the ceiling being 30½ feet from the floor. Beneath the stage, which is 48 by 21 feet, is storage space for folding chairs. Disappearing footlights of three colors, as well as electric outlets for other lighting effects, are built in, and all the lights of the auditorium section are controlled from the stage switchboard.

The locker and shower rooms, located at each side of the stage, are easily accessible from the gymnasium; these also may be entered directly from the outside. Their location was chosen to permit their use as dressing rooms during theatricals. They are of ample size. The floors of these rooms are covered with composition flooring. The main toilet rooms are connected to these locker rooms, or may be entered directly from the corridor. There are two small toilet rooms on the second floor.

Above the stage, isolated from the remainder of the building, is a room 21 by 48 feet for band practice. The ceiling is acoustically treated and the walls are plastered.

At the south entrance are the offices, consisting of a general office, the principal's office, a large fireproof storage vault and toilet.

The building is entirely fireproof, with the exception of the roof over the gymnasium. Steel bar joists were used for all of the classroom floors with concrete slab over metal lath and covered with maple flooring. Corridors and ramps are of re-

enforced concrete slab construction.

A serious problem of construction was caused by the nature of the soil, and the nearness of water to the surface of the ground. There could be no basement and the foundation was kept as close to the surface of the ground as possible.

When the soil is dry, it is very hard, but any moisture causes it to lose its bearing value. Consequently, the footings are extremely wide, using only 1,200 pounds of pressure per square foot. Surface water is kept away from the footings by a 4½-foot cement apron entirely around the building. At the outer edge was placed a trench, 5 feet deep, filled with coarse gravel and with an open joint sewer line at the bottom discharging into the sewer. Any seepage water is collected by this before it can reach the footings. Because of the excess amount of alkali in the ground, all of the concrete foundation below

grade is entirely covered with asphalt waterproof paper, as any alkali coming in contact with the concrete will eventually disintegrate it.

All classrooms and the auditorium are provided with a program clock controlled from a master clock in the principal's office. There is an intercommunicating phone system.

The heating plant is a low pressure steam system with direct radiation, the boiler room being located on the ground floor at the rear of the auditorium. Gymnasium radiators are concealed under the bleachers with registers above and intake registers at the floor.

The building contains 481,000 cubic feet and was erected at a cost of \$133,451, or 27¼ cents per cubic foot. In addition, \$10,213 was spent for equipment and \$14,243 for land, architectural and miscellaneous expenses making a total of \$157,907. Of the amount, \$71,000 was obtained through a PWA grant.

Spring Care of the School Lawn

THE first step in preparing the lawn for spring and summer is to rake it thoroughly as soon as the ground has thawed. This serves to "scarify the surface soil," according to *Lawn Care*, also "to remove leaves, dead grass and other debris that may have accumulated over winter."

The next step is an application of the right grass food. From recent experiments we know it is best to do this even if the ground is frozen. As soon as the grass starts growing the food becomes available, thereby giving grass an extra push ahead of crab grass and other weeds that do not start until late spring. If fertilizer is put on while the weather is still quite cool there is no danger of burning even though it is not washed or brushed in.

Regular feeding is the most important factor in weed control. It makes the grass plants more sturdy and aggressive, enabling them to crowd the weeds. The explanation of this lies in the fact that the general cultural practices of lawn maintenance, such as frequent mowing, are

more favorable to grass than to most weeds.

Unless seeding was done before, it should follow the fertilizer application. Rake it in lightly or cover it with some good weed-free soil applied as a top dressing. A coating of about ¼-inch will be beneficial to the seed as well as to the established plants.

Spring rolling is important. A heavy roller is not required since the purpose is simply to firm grass crowns and roots into the soil. It is a mistake to try to level a lawn by rolling. If the roller used is heavy enough to accomplish that, it will pack the soil causing it to bake during the summer months. Sandy soil can stand heavier rolling than clay soils. It is best to roll after seeding but the time element is most important. Usually there are just a few days in spring when a lawn is dry enough to be rolled without packing the soil, and yet sufficiently moist so the rolling does some good. A lawn ought to be rolled then even if it is necessary to roll it again after seeding.

AN INVITATION

to School Officials and Architects to use our CONSULTING & PLAN SERVICE

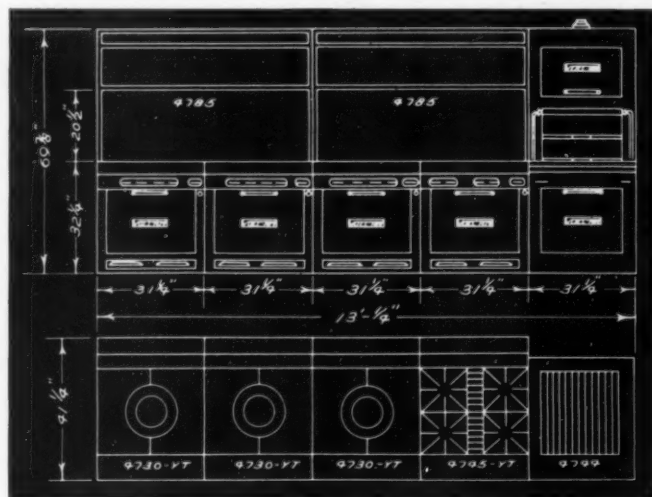
on Cafeteria Cooking Equipment and Home-Making or Domestic Science Kitchens

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- save money on installation costs
- lay out the equipment for most efficient operation
- reduce operating costs

We have also been able to be of service by having a representative meet with school officials and architects and discuss problems and suggested solutions.



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If you are planning new buildings, enlarging old ones or replacing obsolete equipment, we will send suggested plan, illustrations, descriptions and dimensions of proposed equipment, and photos of actual installations.

In the case of a Cafeteria, send plan or sketch of kitchen, number of children to be fed, type of luncheon. Let us know if you will do all your baking, roasting, etc. In the case of Home-Making Rooms, send plan or sketch of room, number of children in class, etc.

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This Service is absolutely without charge and there is no obligation to buy. We do not sell direct, and

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Reduces Meat Shrinkage up to 66%. By using automatically controlled low temperature roasting, more servings per roast can be obtained . . . important in these days of high meat costs.

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equipment should be purchased through dealer or contractor who is competent to install and adjust it.

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Analyze Your Food Costs

EDNA GILBERT

SCHOOL cafeterias, admittedly, should be run for the benefit of the pupils, giving them the maximum of food at a minimum price. To do this and to have only a minimum of profit, yet at the same time to have no loss, they must be conducted on a sound financial basis.

Only the cafeteria manager who has the detailed facts of her financial operation constantly before her can be permanently successful. In the large centralized systems that can afford competent accountants the records are, of course, always available. However, the director should know how the facts recorded should be summarized and presented. In the small system there should be in operation some general record plan, having at least a monthly report, that gives the necessary information in regard to gross sales and expenses.

Second Year of Trial

At Rayen School cafeteria, Youngstown, Ohio, there was long felt the need for information on income and expense and for a business procedure which would assure food control. Beginning in September 1936, a complete new system was installed.

This school cafeteria is a service unit with an educational purpose. It is self-sustaining, with the salary of the manager paid by the board of education and all other expenses, such as salaries, cost of food and operating costs, covered by the sale of food.

The objective is to serve the maximum amount of nutritious food and to place as much of that food as possible within the financial reach of every child. Any profits, beyond a stated amount to be carried for a safe working capital, are consumed at once, being used for bigger and more nourishing lunches. To realize this objective necessitates, among other things, knowledge of costs.

The time required daily to keep the records is negligible. It is sug-

gested that the manager be assisted by one of the pupil cashiers who has studied bookkeeping. At best keeping records is a disagreeable task, and, naturally, the cafeteria manager is desirous of making them as simple as possible. On the other hand if one finds that cost records will provide information which will result in greater efficiency, they may well be given a little time and attention. To the efficient manager this means better food and, at the same time, lower prices.

In addition to keeping the records, it pays to go a step further and to analyze and interpret these reports. Food control gives the warning as soon as the cost turns in the wrong direction. It points out exactly where the difficulty lies and enables the manager to take prompt action.

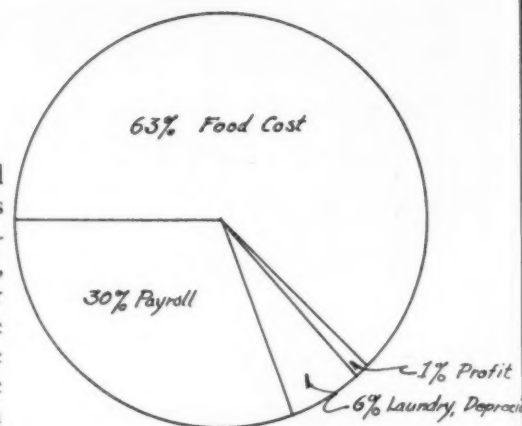
By securing definite figures to act upon, the weak department may be brought up to par in several ways, either by reducing the prepared food cost, by increasing the selling price if it is found advisable, or by reducing, if not actually eliminating, the variety of dishes offered.

Three Main Aspects of Control

These cafeteria records deal with the three major aspects of food cost control, namely, control of food, control of personnel and control of money. The records are as follows:

1. Purchase and storeroom records, such as orders and inventories of (a) storeroom, (b) candy, (c) cookies and (d) direct purchases.
2. Kitchen and service records, such as recipes and menu and counter records.
3. Weekly accounting, financial and food control reports, monthly statements of income and expense and the balance sheet.

The surest method of food cost control centers around careful distribution. As there is no one in the cafeteria to dispense the goods from the storeroom, a plan has been de-



How cafeteria food dollar is spent.

vised that gives an accurate check on the inventory at all times. A daily requisition is made out by the manager and all supplies needed for the day are taken to the kitchen and stored in a cabinet. The requisitions are charged against the storeroom once a week.

The voucher system is used to record all purchases and expenses. It is prepared from the invoice, which has been checked and approved. The total amount is divided according to the amount of resale food (food served in form as purchased) and process food (food requiring some preparation for serving). Anything other than food is entered in the "sundries" section and the name of the account to be charged is entered.

A petty cash fund of \$10 has been established as a method of handling small cash disbursements. To replenish the fund, a voucher is made out for the total of the petty cash used and a check is written for the amount, payable to the fund.

The cafeteria cashier takes charge of handling the money after lunch. She counts and records the receipts separately, according to the division of resale and processed food. The school accountant then recounts the money and deposits it in the bank. A detailed cost is figured on each recipe and for combinations of recipes.

The cafeteria personnel is employed by the manager and paid from the cafeteria funds. The payroll is made out for a two-week pe-

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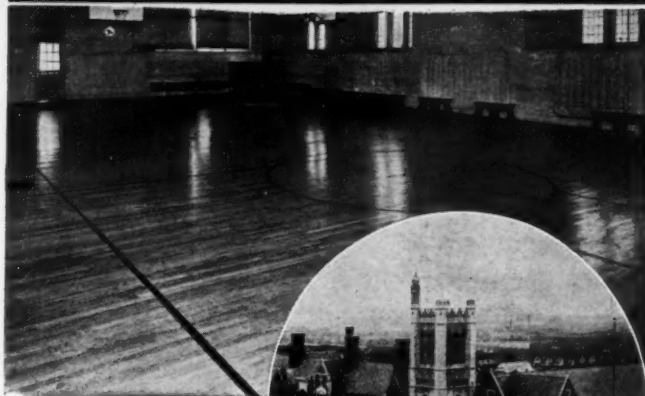
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riod and the amount of wages due each employe for that time is entered.

A menu and counter record is used to instruct the employes on the amount of food to be prepared, the size of servings and the number of servings they should have from the amount prepared. The price, the number of servings sold and the value of the number sold are figured from the sales. A count was obtained last year by having a pupil check the servings as they passed the cashier. This year a new checking machine has been provided for this purpose.

Assuming that all managers are acquainted with the accounting books and the books of final entry, they will not be explained. Those included in this system are voucher register and cash payments journal, cash receipts journal, general journal and general ledger.

The facts recorded in these books of account are summarized in such form that anyone may understand them. These summaries consist of the balance sheet and the profit and loss statement.

In the balance sheet, the current assets include cash and other assets which may be turned into cash available for the liquidation of current liabilities. The inventories of food and supplies are valued at cost. Food inventories include the food kept in the storeroom as well as that held in the kitchen and other departments. Cleaning supplies and paper supplies are carried as asset accounts.

Depreciation Rate

The kitchen, service equipment and dining room equipment are in separate accounts and provide for depreciation at the rate of 10 per cent of the original cost per year.

China, glass, silver and linen are revalued at the end of the year on the basis of the physical inventories. For the last three years our small kitchen equipment, such as cooking utensils, mixing spoons and ladles, has been replaced with stainless steel ware. As a result the depreciation rate on it has decreased this year from 10 to 2 per cent. This stainless steel ware is guaranteed for a lifetime and when fully equipped with it we can carry an even smaller depreciation account.

The profit and loss statement is made up monthly and as a result

sales and costs are thought of in monthly rather than in yearly totals.

One copy of this statement is prepared for the principal of the school and one is filed in the cafeteria.

The profit and loss statement summarizes the income and expenses of the cafeteria for a month. It shows the sales, cost and the gross profit relative to food, cleaning supplies and paper supplies separately and in total; it indicates such other sources of income as the purchase discount; it contains a list of expenses, and shows the net profit.

The most convenient and satisfactory method of expressing the expenses is in terms of percentages of the sales. It is the only means of obtaining the true picture of the business for comparison. Although one may know the food cost as compared with the sales in terms of dollars and cents, the significance of these figures cannot be grasped unless one knows that the food cost was 60 per cent of the sales and the labor cost, 30 per cent.

Dividing Cafeteria Dollar

The only reliable guide to successful management of a cafeteria is a knowledge of costs. Therefore, the manager should make sure that the fixed expenses bear such proportion to the sales that enough is left for operating costs and a small margin of profit. Generally speaking, these expenses do not exceed from 5 to 6 per cent of the sales.

Out of the remaining 95 per cent must come cost of food, pay roll, operating expenses, maintenance and the small margin of profit. The total amount of the pay roll, operating expenses and maintenance is around 28 to 30 per cent of the sales, which leaves 65 per cent for food cost and profit.

The higher the food cost the lower the profit and vice versa. Needless to say a school cafeteria should always serve the best food, which means that food costs are high, and as a profit is not the objective, a food cost of approximately 60 to 63 per cent is considered fair.

Food cost needs much closer and more careful supervision than any of the other expenses. Whereas a cut of 10 per cent in pay roll may save 2.8 to 3 cents on each dollar sale, a

10 per cent in pay roll may save 6 to 6.3 cents.

Illustrating costs by means of a diagram is both interesting and helpful. The diagram illustrated represents total receipts marked off in 100 parts which represents 100 per cent. The total cost of each item of expense is divided by the amount of the total sales, and the result is the percentage cost. Therefore, the percentage cost of food, as here shown, is 63 per cent and 63 parts are marked off on the diagram. The next step is to figure the percentage of the pay roll and proceed in the same way, marking off 30 parts.

Weekly Food Cost Report

The chart shows that the percentage cost of the laundry, repairs and depreciation was 6 per cent and the profit was 1 per cent.

Recognizing the need of ascertaining the percentage of food cost weekly, there is available in our reports the cost of food purchased and delivered to the kitchen and other departments, the cost of food issued from the storeroom, the inventories of the kitchen and storeroom and the amount of sales.

This food cost report informs the manager each week of the accumulated costs and sales in detail from the beginning of the month. The percentage of gross profit on cost is indicated to facilitate a review of the operations at any time.

In addition to the detailed record of the cost and sales for the week and again for the month, the information on the cost of food issued to the employes is available. The cost of the employes' meals is figured at so much a day and is charged only to process food. This cost is deducted from the general food cost at the end of the period.

In addition to total, weekly and daily costs, it is important to know the cost of each meal per person. This is called the per capita cost and may be figured by the day, week or month.

To find the average per capita cost, the total number of customers served is taken (this is obtained from the cash register), the total cost of the food served to them is estimated and this amount is divided by the number of customers. To figure the per

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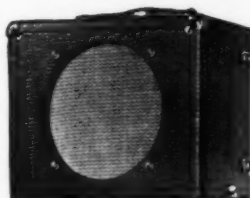
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capita cost of the pay roll, the total cost of the pay roll for the day is divided by the number of customers.

Per capita costs may then be figured for all other expenses, such as laundry and depreciation. Totaling all these per capita costs gives the total costs per capita per meal. Per capita costs of such departments as the kitchen and bakery may be figured and also the per capita cost of feeding employees.

A percentage cost of various foods may also be found. For example, the total cost of milk for a month divided by the total cost of food for the month gives the percentage cost for the milk. This process of finding costs of different kinds of food may be carried through every article in the reports. With these figures one is able to analyze all costs.

If the percentage cost of any article is found too high, the manager must find out why. Upon investigation she may learn that there has been a change in prices or a leak may be traced and stopped.

Moreover, the need for figuring the labor costs in food preparation must be recognized. The first step is to secure the approximate number of labor hours used each month in food preparation. Second, by dividing the total monthly salary paid the employees engaged in food preparation by the number of hours they are occupied, an average hourly labor rate is obtained. In this is included the cost of the employees' meals. This rate is used to extend the actual labor hours in food preparation, which is entered on the individual cost record where a time study is made in figuring the cost of a recipe.

This food control system is practical in that it does not interfere with the working routine of the kitchen, and sufficient detailed information is given on which one can base corrective measures. The information is reliable, because after an analysis of sales and costs is made, the final result is the same as the sales and costs in the books of account.

The information compiled and accumulated in the weekly report is supplemented and adjusted at the end of the month. Thus the monthly food cost report is a detailed analysis of the food sales, cost and gross profit and loss statement.

One of the best ways of showing how sales, costs and expenses vary is by means of a graph. The tendency of business to increase or decline is more easily observed by the use of these charts than by consulting tabulated figures.

A picture of each item is drawn separately. That is, the total sales are graphed on one page, the food costs on another and the pay roll on another. This gives a picture of how total sales vary from day to day. The food costs, pay roll and other expenses are charted by the week and any sudden rise or drop in the line is soon noted.

However, for true comparison, it is well to combine all these in one graph. On this are charted the items by the week, using a different colored pencil for each item. The total receipts, for example, appear at the top in blue pencil; below that, in red pencil, are shown the food costs. Then a line in green showing the total of all expenses is drawn, and this line in combination with the total receipts line is of the most significance.

The converging of these two lines signalizes danger. Their intersection means that the small margin of profit

has disappeared, and, of course, when the total expense line goes above the total receipts line a loss is thereby indicated.

It is interesting to note that the hills and valleys correspond in almost every instance. Where there is a peak in receipts there is one in food costs and total expenses. The pay roll line remains almost constant throughout the year.

Another interesting picture which can be presented in graph form is comparison from year to year in total sales, food costs and pay roll.

This year an attempt is being made to show by means of a graph the percentage distribution of purchases among different types of foods. It will show the percentage of pupils buying milk and protective foods as compared with those buying resale foods, cakes and candies.

If school lunchrooms would adopt a uniform system of food cost accounting it would enable those who wish to make a comparative study of lunchrooms to obtain a true picture of their financial operation. The system of accounting used at Rayen School is presented in "Food Cost Accounting and Food Control" by Neva Henrietta Radell.

FOOD FOR THOUGHT

Technic for Dipping Ice Cream

- The health officer of Plainfield, N. J., recently set about to ascertain why the bacteria count was higher in loose ice cream than in packaged ice cream made at the same plant. The vender's dipper or scoop was suspected, and this proved to be an important factor in the contamination. After some experiments it was concluded that ice cream scoops and other dispensing utensils should be kept on a dry rack protected from flies, dust and other sources of contamination, instead of in water. They should be rinsed with either hot or cold tap water before and after each use. When this is done, the amount of contamination can be greatly reduced.

Clean Hands

- In training food handlers, clean hands are the most important yet simplest expedient to prevent contamination, in the opinion of Dr. William H. Best, deputy commissioner of the New

York City Department of Health. Adequate washing facilities conveniently located with soap, running hot water and clean towels should be provided in school cafeterias, as well as in commercial food establishments. Instruction in handling food with tongs and forks should be given, in an effort to minimize food handling with bare hands. Placards of instruction to food handlers should be posted in washrooms and toilets.

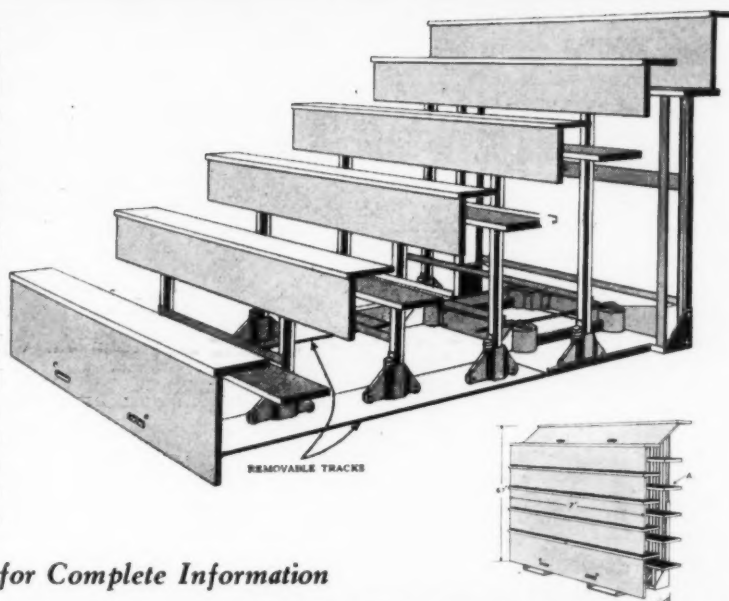
To Stop Food Bolting

- Susan Z. Wilder, nutrition specialist at South Dakota State College, suggests that mothers obtain the teacher's cooperation in setting aside a definite number of minutes for children to eat lunch. Most boys and girls like to eat as rapidly as possible so they can begin games or other play. The habit of bolting the food can be counteracted more easily if all the children know that none of them can start playing early by hurrying through lunch.

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BETTER PLANT PRACTICES

Care of Wood Floors

"When properly laid, wood floors are satisfactory in classrooms and easy to care for." Having prefaced his remarks with this statement, Charles Welch, building superintendent, Wolcott Central School, Wolcott, N. Y., proceeds to describe his treatment.

"A thorough cleaning and waxing three times a year are sufficient to keep them in fine shape. Most floors of this type when first laid are filled and sealed either with a penetrating or a surface finish. Several methods may be used in reconditioning them.

"One is to reseal them with the original finish or something similar. This method, while lasting longer, is costly and owing to this fact is not done often enough to preserve the appearance of the floor. Another method is waxing. Wax used may be paste or spirit wax, or the water emulsion type. The spirit waxes are harder and wear longer but take longer to apply. Because of the floor space we must cover and the limited amount of time in which we have to work, we use the water emulsion type wax.

"Our method of cleaning and waxing is simple and fast. Two men are equipped with electric scrubbing machine, double mopping outfit and two mops. One pail contains the cleaning agent, the other rinse water.

"First the desks are moved to the side of the room nearest the door. The other half of the room is then scrubbed, rinsed and dried. The desks are then moved back and the rest of the room is treated in the same manner. This work is done by the day men. From six to eight rooms in ten hours is a good day's work. When the night men come on duty, one man shifts desks in the rooms to be cleaned while the other man applies wax to the floors that are cleaned or rather to half the floor, as the desks are still in the room. By the time he has waxed five or six rooms, the wax on the first room is dry enough to polish, and the man who is moving desks leaves this job and proceeds to polish the floors.

"As soon as the first coat is finished the man who is waxing applies the second coat. When the polisher has finished with the first coat on all rooms that are cleaned, the second coat is ready to polish. When one-half of each room has been waxed twice and both coats polished, the waxer moves the

desks to the finished side of the room and repeats the operation. If there are not enough rooms cleaned to keep them busy all night, they clean floors during the time they have left. In this way men and machines are kept busy and there is no lost time. This work is being done at a cost of about one-half cent per square foot and has proved very satisfactory."

Looking Ahead

Vacation days seem far off, to be sure. No better time than now, nevertheless, to be making plans for caring for school equipment during that period when the building is not occupied. What were the results last year, and how can the conditioning procedure be improved?

What constitutes sound practice is reported from Roselle, N. J., and it is recounted at this time so that there will be ample opportunity for studying this important question. All machinery and equipment are properly cleaned by the pupils under the care and supervision of the instructors before the closing of the schools. Any machinery requiring lubrication and greasing to prevent rusting during the shut-down period is thoroughly conditioned for protection. This practice applies solely to educational equipment. Motors and machinery coming under the head of building operation and maintenance are cared for by the custodial staff under the direction of the building supervisor.

No Chance for Errors

A custodian friend who takes great pride in the systematic arrangement of his work was discussing the importance of "labeling." "I can remember as a child," he said, "getting a peek into my grandmother's preserve closet. Arranged in military precision on every shelf was bottle after bottle of delicious jelly and jam, with a label plainly identifying it. No chance of any one picking up strawberry when he wanted currant. It got me started rearranging my own work."

He proceeded to demonstrate. His service pipes are clearly identified with different colors; the hot water, cold water, steam and gas lines each speaks for itself, in red, blue, black and aluminum. He also pointed to the valves, each tagged so that should some emer-

gency arise anyone will know which to turn to. It's something to think about, making the engineering department foolproof.

Will It Work?

At this point it would seem timely to investigate a brief warning from the Engineering Extension Service, Iowa State College, on fire hose. According to L. W. Mahone, "A safety valve that works is a fine piece of insurance. One that doesn't work, that sticks, is a real menace, as we have a feeling of false security. Some schools have attempted to reduce fire hazards by building in small standpipes to which a fire hose is attached on each floor. This hose is usually stored in folds on metal racks. Personal observation indicates that some of it has been so stored for many years. It is fine that it hasn't been needed, but suppose you should need it. Will it work? A fire starts in a laboratory; the hose is dragged in and water turned on; the water bursts through the hose and floods the hall and the fire burns on."

Boiler Water Treatment

"Why do some low-pressure boiler plant operators use one sodium compound for feed water treatment and some another?" This question is frequently raised. Here is the answer according to the engineering extension service, Iowa State College:

"Local conditions usually determine this choice as it is sodium oxide that produces the results in the boiler and there are several common sodium compounds that furnish sodium oxide. However, these compounds do not have the same amount of sodium oxide available per pound of compound. The accompanying table shows the available sodium oxide in commercial compounds.

Caustic Soda	77.0%
Soda Ash	60.7%
Trisodium Phosphate	25.5%
Sodium Silicate	13.7%

"From this it can be seen that pound for pound caustic soda is the best source of sodium oxide. However, caustic soda should be used only under exact chemical control, as an excess of this compound in the boiler is undesirable. Since such exact control is not available to most low-pressure plants, soda ash, which is next best, is the most commonly used. When trisodium phosphate is used, it takes about two and one-half times as much as it would of soda ash to get equally effective results. And if sodium silicate is used, five or six times as much is required."



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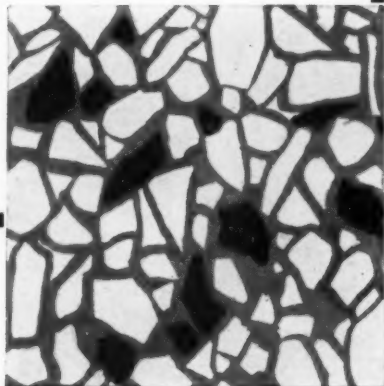
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NEWS IN REVIEW

Safety Reprimand

In an unprecedented action, the New York City Board of Education ordered Supt. Harold G. Campbell publicly to reprimand the principal of the Brooklyn Technical High School and a teacher of forge work in the school because their alleged neglect of the safety rules of the board and of the industrial code resulted in the loss of an eye by a pupil during a laboratory experiment.

The pupil, who was not wearing goggles as the safety regulations require, was injured when molten aluminum exploded while he was assisting the teacher pour it into a mold.

The accident cost the school system \$15,000 as a result of an out-of-court settlement. This payment was one of the largest individual damage settlements ever made by the board.

The board approved a report of its law committee holding the principal responsible because "the safety rules were not distributed to all teachers and were not carried out faithfully and continuously." The teacher was likewise blamed because "although he did not have a copy of the safety rules, he knew that the activity was dangerous."

ADMINISTRATION

Poverty Affects Attendance

Lack of shoes and heavy clothing is the biggest factor in keeping 500 Louisville children away from school daily, Frederick Hess, director of attendance at Louisville, Ky., told members of the local board of education recently.

Among white children alone, the percentage of absence because of poverty has jumped this year from a four-year average of 2 per cent to 3.2 per cent, or nearly double, and the situation is growing progressively worse, Mr. Hess said.

The school board cannot, under law, use any of its funds for relief work. Kentucky provides free textbooks and transportation for school pupils. Mr. Hess reported he had taken the problem before various local relief agencies who had informed him they could do nothing except in the cases of a few families on direct relief.

Postal Libraries

County school superintendents in Arizona are rapidly following the example set in Yavapai County during the

last three years in providing circulating libraries.

Yavapai has fifty-four schools remote from library facilities, so that the circulating system includes fifty-four "libraries" of twelve volumes each. An individual canvas wrapper goes with each of these assortments. At the beginning of the term, each school receives a "library" from Carl W. Hickerson, county superintendent at Prescott. Books are lent to pupils for a month. Then the teachers put the books back in their wrappers and mail them on to the next school on a schedule furnished by the superintendent, so that each library has a fresh supply of books every month. Each district participating contributes \$5 a year.

Administrators' Credentials

Five types of administrators' credentials will be issued by the state of Oregon under regulations prepared by the state superintendent of public instruction and representatives of state teacher training institutions.

1. A superintendent's credential will be issued to qualified superintendents of school systems employing twelve or more teachers.

2. A supervisory principal's credential will be issued to an elementary school principal under administration of a local superintendent.

3. A supervisory principal's credential will be issued to a high school principal under administration of a local superintendent.

4. An administrative principal's credential will be issued to an elementary school principal directly responsible to a school board.

5. An administrative principal's credential will be issued to a high school principal directly responsible to a school board.

MEETINGS

Exhibit School Art Work

Important exhibitions of school art work will be shown at the twenty-ninth annual convention of the Eastern Arts Association, April 6 to 9, in Boston. Speakers who will appear on the convention program are Walter Gropius, founder of the Bauhaus in Germany; Charles J. Connick, designer and maker of stained glass; George H. Edgell, director of the art museum of Worcester, Mass.; Richard C. Morrison, director of



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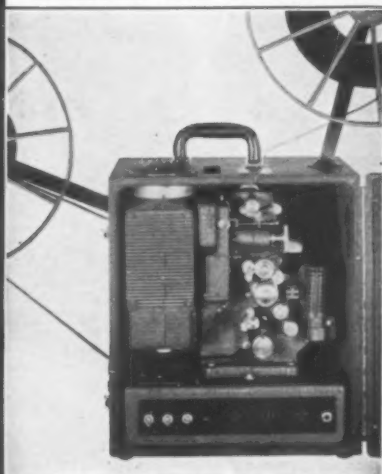
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Rotarians Elect Chenoweth

After holding the biggest meeting in its twenty years of existence at the 1938 convention of the American Association of School Administrators, the Schoolmasters' Rotary Club selected A. S. Chenoweth, superintendent of the Atlantic City schools as its president for the coming year. Sam T. Neveln, superintendent of schools at Austin, Minn., who has served as secretary-treasurer since 1924, was reelected.

TRANSPORTATION

Two-Mile Limit

The supreme court of Iowa has handed down a decision in the case of *Lanphier v. Tracy Consolidated School District* in which it held that the board in a consolidated school district cannot be compelled by mandamus proceedings to send its school bus to the home of a resident patron, but may require such patron to transport his own children not more than two miles to connect with the bus for which he shall be allowed reasonable compensation. The court further held that the board's action in making such requirement can

be reviewed only through the process of appeal to the county and state superintendent.

Pamphlet on Bus Operation

A circular entitled "School Bus Construction and Operation" has been prepared by Fred L. Mahannah, deputy state superintendent of public instruction for Iowa. It is designed for schools maintaining bus transportation service and for operators or managers of school buses.

School Not Liable

A pupil of a California school district that provided transportation for the pupils of the district was struck by an automobile while walking home on a day when the school district had failed to provide transportation. A California court held that neither the district nor its officers or employees were liable for such injury since the failure of the board of education to provide transportation for the pupil on that day was not the proximate cause of the injury.

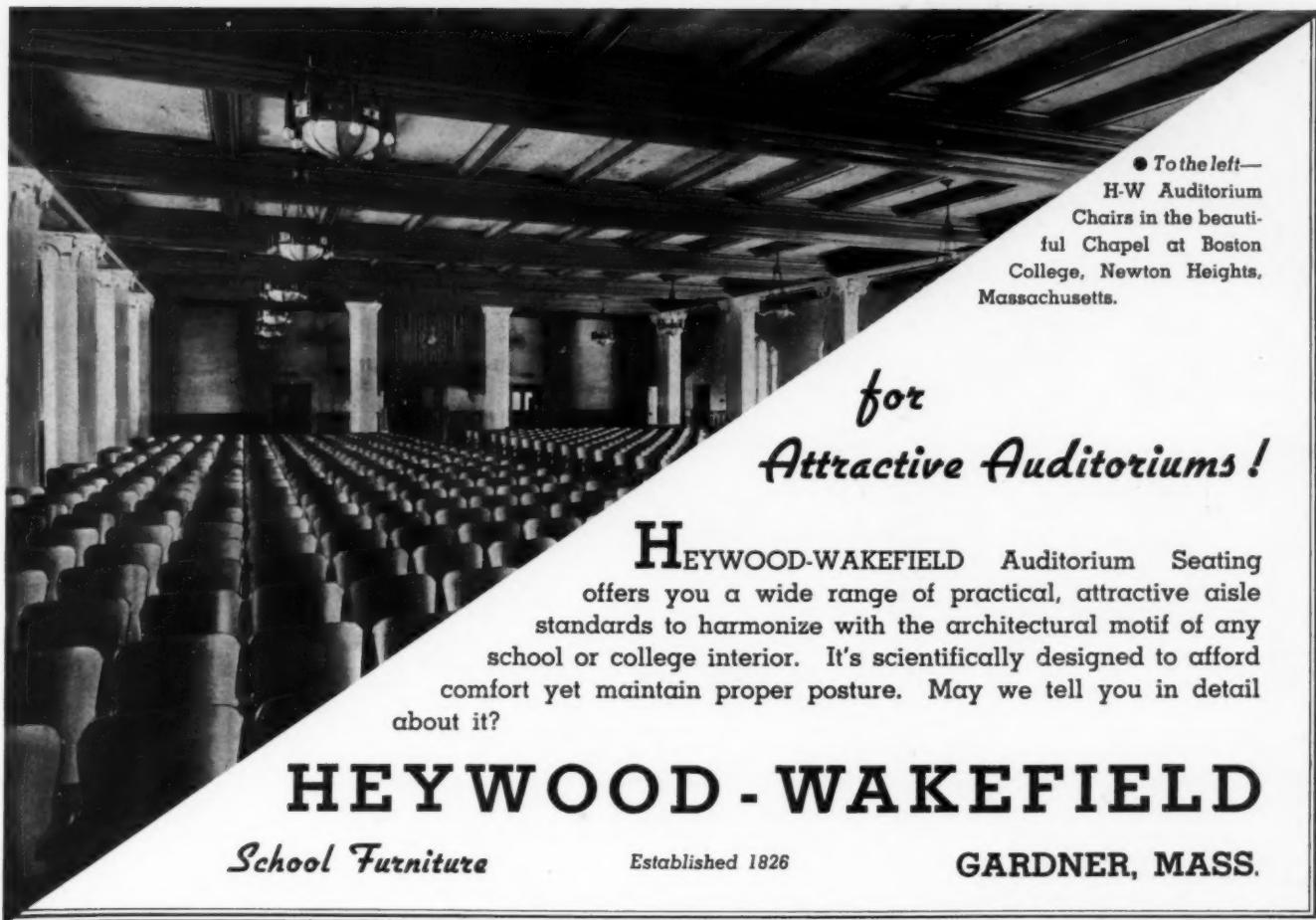
VISUAL EDUCATION

Teach Film Evaluation

That teachers may be adequately prepared to evaluate films for their instructional value and to use them effectively in the schools, the division of general education of New York Uni-

Coming Meetings

- | | |
|---|--|
| April 13-15—Mississippi Education Association, Jackson. | Oct. 27-28—Maine Teachers' Association, Bangor. |
| April 13-16—Kentucky Education Association, Louisville. | Oct. 27-29—Minnesota Education Association, Minneapolis. |
| April 14-16—Georgia Education Association, Atlanta. | Oct. 27-29—Rhode Island Institute of Instruction, Providence. |
| April 16—Massachusetts Teachers Federation, Boston. | Oct. 27-29—Montana Education Association, district conventions, Kalispell, Billings, Great Falls and Bozeman. |
| April 19-23—Association for Childhood Education, Cincinnati. | Oct. 27-29—Colorado Education Association, district conventions, Denver, Pueblo and Grand Junction. |
| April 20-22—National Catholic Educational Association, Milwaukee. | Oct. 28—Connecticut State Teachers' Association, New Haven, Hartford and Bridgeport. |
| April 20-23—American Association for Health and Physical Education, Atlanta, Ga. | Oct. 28-29—Maryland State Teachers' Association. |
| May 15-20—National Congress of Parents and Teachers, Salt Lake City, Utah. | Nov. 3-5—Iowa State Teachers' Association, Des Moines. |
| June 6-10—Short Course for School Cafeteria Managers, Oklahoma A. & M. College, Stillwater. | Nov. 3-4—Arkansas Education Association, Hot Springs or Little Rock. |
| June 20-25—National Association of Engineers and Custodians, St. Louis. | Nov. 4-5—Kansas State Teachers' Association, Kansas City, Topeka, Salina, Hays, Garden City, Hutchinson, Wichita and Pittsburgh. |
| June 21-24—Sixth Annual Custodian Training School, Iowa State College, Ames. | Nov. 10-11—Delaware State Education Association, Newark. |
| June 26-30—National Education Association, New York City. | Nov. 10-12—New Jersey State Teachers' Association, Atlantic City. |
| June 27-July 7—American Association for Teachers of the Deaf, Wayne University, Detroit. | Nov. 16-19—Missouri State Teachers' Association, Kansas City. |
| June 30-July 1—Conference on Business Education, University of Chicago. | Nov. 20-23—South Dakota Education Association, Mitchell. |
| Oct. 10-14—National Association of Public School Business Officials. | Nov. 22-25—Virginia Education Association, Richmond. |
| Oct. 13-15—Vermont Education Association, Burlington. | Nov. 24-26—Texas State Teachers' Association, Dallas. |
| Oct. 26-28—West Virginia State Education Association, Charleston. | Nov. 25-26—Idaho Education Association, Boise. |
| Oct. 26-28—North Dakota Education Association, Fargo. | |
| Oct. 27-28—Indiana State Teachers' Association, Indianapolis. | |



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NEW HORIZONS, a recently published booklet, will familiarize you thoroughly with the new teaching tool, the educational motion picture... with its nature, its applications, its values, the technique of using it effectively, and the experiences of educators who are using it. Send the coupon for your free copy. Bell & Howell Company, Chicago, New York, Hollywood, London. Established 1907.



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versity is establishing demonstration centers in the use of the motion picture as an educational medium.

Teachers attending the centers will be aided in determining the rôle of the motion picture in education, in developing new criteria for the evaluation of the film as an educational device and in discovering effective methods of using the motion picture in instruction.

Each center will function as a demonstration-laboratory-discussion group. Demonstration films, both sound and silent, will be selected for content in terms of group interests to provide practice in analysis and evaluation of films for curricular usefulness.

The course will be offered each term in a limited number of demonstrations centers established in cooperation with the public schools.

The New Ethiopia

"Ethiopia Today," a silent three-reel short subject produced by Dr. Kurt Wiese, an authentic record of events since this country was proclaimed

Italy's "New Empire," has been especially edited for integration with the school curriculum and is ready for distribution by Garrison Film Distributors, Inc.

"America's Disinherited," a story of the sharecropper, with commentary by Dr. John Haynes Holmes, also is available for distribution.

Solicit Audio-Visual Experiences

The Northwest Audio-Visual Committee is soliciting publication material from teachers in the states that it serves dealing with actual experiences in applying audio-visual aids in classroom teachings. These articles should describe how and why any of the following visual aids were introduced and used successfully in some unit of work: mounted pictures, museum exhibits, models, stereographs, stereopticon slides, film slides, opaque projector, silent or sound films and radio. Donald K. Lewis of the Central High School, Red Wing, Minn., is in charge of this phase of the committee's program.

Films for the School Screen

Physical Geography and Geology II

Atmospheric Gradation—Reveals the numerous ways in which the atmosphere plays a part in altering the earth's surface. Shows how temperature variations result in the disintegration of rocks by spalling, and how temperature variation, together with chemical action of the atmosphere, results in exfoliation. The movement of sand, loess, dust and volcanic dust over great distances on the earth's surface is dramatically visualized. Produced under the direction of Dr. Carey Croneis, professor of geology, University of Chicago. 1 reel. 16 and 35 mm., sound. For sale. Erpi Picture Consultants, Inc., 250 West Fifty-Seventh Street, New York.

The Work of Rivers—Presents dramatically the erosion cycle of water on the earth's surface. Models and animated cartoons are employed to explain such features as Niagara Falls, deltas, meanders, ox-bow lakes, rejuvenated rivers, lakes, water gaps and sand bars. Directed by Dr. Carey Croneis, professor of geology, University of Chicago, for high school and college use. 1 reel. 16 and 35 mm., sound. For sale. Erpi Picture Consultants, Inc., 250 West Fifty-Seventh Street, New York.

Erpi Geology Series—The two pictures described above are the first of a series of six pictures produced by

Dr. Carey Croneis of the University of Chicago. The remaining four are: *Ground Water*, *Geological Work of Ice*, *Mountain Building* and *Volcanoes in Action*. Erpi Picture Consultants, Inc., 250 West Fifty-Seventh Street, New York.

Extremes of Nature—Forces that make and unmake planets; physical forms and climates of the earth: desert sands, fertile valleys, volcanoes, earthquakes, heat and cold. 1 reel. 16 mm., sound. For sale. Edited Pictures System, 330 West Forty-Second Street, New York.

The Work of Underground Water—A study of the geologic work of underground water and the expressions of the result on the surface. Caves, sink holes and natural bridges sculptured by ground water because of its ability to dissolve mineral matter, as well as springs, artesian wells and geysers are considered. 1 reel. 16 and 35 mm., silent. For rent or for purchase. Films of Commerce Co., Inc., 35 West Forty-Fifth Street, New York.

Volcanoes—Products of volcanoes and the life history of a volcanic cone, contrasting quiet overflow types with those having explosive eruptions. 15 minutes. 16 mm., silent. For rent or for purchase. Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

BUILDINGS

Mine Caves Damage Schools

Three school buildings in Hughestown borough, near Wilkes-Barre, Pa., were damaged recently when the ground above a mine suddenly buckled. Three tremors were felt between 7:50 and 8:05 a.m., and school authorities barred 700 pupils from entering the buildings. The children were sent home with instructions not to report for classes unless notified through the press.

Hugh Craig, vice president of the school board, was on the scene of the disturbance. He stated that school authorities have long feared that a "squeeze" might damage the buildings and they have tried several times to get mining officials in Harrisburg to conduct an investigation of the workings of the company mining beneath this area and to make a report on safety of surfaces on which school buildings stand.

Mr. Craig made a study of the three damaged schools and announced it would be unwise to permit occupancy again until an investigation of the workings under them is completed. There appears to be no immediate danger, but another disturbance might draw the walls apart and cause the buildings to collapse.

Surface settlements are a common occurrence in that territory. Often structures are damaged by mine caves.

Remodeled for Research

Completely remodeled, the library of Adelphi Academy, Brooklyn, N. Y., now boasts a modernized arrangement of its 8000 volumes and new furnishings to facilitate research. One of the new features is the hanging of four paintings by Walter Beck.

RADIO

Setup for Experimentation

Indiana State Teachers College, Terre Haute, Ind., is broadcasting a series of four programs to a select list of forty-four southern Indiana high schools from its campus extension radio studios as an experiment on the use of radio in education. Each program is on the air in the afternoon once weekly, and all are synchronized with the instruction schedule in the respective subjects of history, literature, science and music. The participating high schools use regular receiving sets in the classrooms. Later studies will be made to ascertain how well the pupils retain radio instruc-

tion, and the viewpoints of the teachers will be tabulated. Dr. Clarence M. Morgan, director of radio for the college, pointed out that definite results can be measured through the fact that a concrete list of high schools is co-operating with the programs.

Testing Health Teaching

Dr. I. H. Goldberger, assistant director of health education for New York City, has devised a test for the value of radio dramatizations in health teaching. Using the weekly broadcasts

sponsored by the American Medical Association and the National Broadcasting Company, junior and senior high schools will be divided into two groups. Group 1 will listen to the weekly broadcasts until the end of the first semester, Group 2 will not. Then both groups will be given an examination on the ground covered in the broadcasts. During the second semester the rôle of the two groups will be reversed, Group 2 becoming listeners and Group 1 nonlisteners. The two groups will be examined again at the end of the second semester to sum up results.



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Dr. William Allan Neilson, president of Smith College and an international authority on the English language, is directing the preparation of a handbook of correct pronunciation of American words often mispronounced, to be published by the National Broadcasting Company. In addition, the handbook will contain correct pronunciation of American and foreign place names; correct pronunciation of foreign words and terms, and names of outstanding foreign persons. The handbook, under

the title "Broadcast Speech" will be available from the N. B. C., R. C. A. Building, New York.

Preserve Radio Material

That the social, cultural and political life of this era, as reflected by radio broadcasting, may be preserved, the bureau of radio broadcasting of the University of Michigan is collecting a library of wireless and radio history. The new library will contain all material of value to broadcasters, advertising men and broadcasting students.

On the Air During April

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time.

Daily

12:30-1:30 p.m. — National Farm and Home Hour (NBC Blue).¹

Monday

2:30-3:00 p.m. — American School of the Air, Human Relations Forum, to run through May 2, will consist of a round table discussion among fourteen high school pupils of varying social and financial backgrounds; presented in cooperation with the Progressive Education Association's commission on human relations with Dr. Alice Kelliher directing.

5:30-5:45 p.m. — Dorothy Gordon, Children's Corner (CBS).

6:20-6:30 p.m. — "New Horizons," sponsored by the American Museum of Natural History (CBS).

7:00-7:15 p.m. — Music Is My Hobby (NBC Blue).

10:30-11:00 p.m. — National Radio Forum (NBC Blue).

10:30-11:00 p.m. — Brave New World, Latin-American program sponsored by the U. S. Office of Education (CBS).

Tuesday

2:00-2:30 p.m. — Fun in Music, band lessons under direction of Dr. Joseph Maddy (NBC Red).

2:30-3:00 p.m. — NBC Music Guild (NBC Blue).

2:30-3:00 p.m. — American School of the Air, American literature alternating with music (CBS).

April 5—Operatic Flowering.

April 12—The American Drama, Paul Green.

April 26—The Age of Romance.

May 3—Literature Quiz.

4:45-5:00 p.m. — Current Questions Before the House (CBS).

6:00-6:15 p.m. — Science in the News (NBC Red).

6:00-6:30 p.m. — Let's Pretend, a program of fairy stories for children (CBS).

Wednesday

2:00-2:30 p.m. — Your Health, supplementary material for health teaching in junior and senior high schools, sponsored by the American Medical Association (NBC Red).

HEALTH EDUCATION

April 6—Living With People.

April 13—It May Happen to You.

April 20—Who Chooses Your Doctor?

MOTHERS AND CHILDREN

April 27—Healthier Babies.

May 4—Healthier Mothers.

2:30-3:00 p.m. — American School of the Air, geography (CBS).

April 6—Uruguay—Land of Cattle.

April 13—The Argentine Fruit Country.

April 27—Haiti and Its People.

May 4—Charleston and the Sea Islands.

4:30-5:00 p.m. — Youth in a Modern Community, sponsored by the radio forum, National Congress of Parents and Teachers (NBC Blue).

April 6—Leadership.

April 13—Mileposts, Mrs. J. K. Pettengill, president, National Congress of Parents and Teachers.

5:30-5:45 p.m. — Dorothy Gordon, Children's Corner (CBS).

6:00-6:15 p.m. — Our American Schools, spon-

sored by the N. E. A. to promote teacher welfare and better support for schools (NBC Red).

7:45-8:00 p.m. — Science on the March (NBC Blue).

7:45-8:00 p.m. — Adult Education Program (CBS).

Thursday

2:00-2:30 p.m. — NBC Music Guild (NBC Red).

2:30-3:00 p.m. — American School of the Air, international music programs broadcast by short-wave from European schoolrooms (CBS).

4:00-4:15 p.m. — Science Service Series (CBS).

4:30-5:00 p.m. — Education for Living, sponsored by the General Federation of Women's Clubs (NBC Blue).

7:45-8:00 p.m. — Science on the March, under auspices of the American Society for the Advancement of Science (NBC Blue).

9:30-10:30 p.m. — America's Town Meeting of the Air (NBC Blue).

Friday

2:00-3:00 p.m. — Damrosch Music Appreciation Hour (NBC Red and Blue).

2:30-3:00 p.m. — American School of the Air, vocational guidance (CBS).

April 1—Interview With Boys at Work in Air Conditioning and Refrigeration Plants.

April 8—Interview With Young People at Work in New Housing Projects.

April 15—No program.

April 22—No program.

April 29—Interview With Young Workers in Modern Industrial Chemistry.

May 6—Send-off: New Worlds to Conquer.

3:00-4:00 p.m. — NBC Radio Guild (NBC Blue).

3:30-3:45 p.m. — Current Questions Before the Senate (CBS).

5:30-5:45 p.m. — Dorothy Gordon, Children's Corner (CBS).

6:00-6:15 p.m. — Education in the News, dramatization of news items in education by the U. S. Office of Education (NBC Red).

Saturday

10:30-10:45 a.m. — The Child Grows Up (NBC Blue).

11:00-11:15 a.m. — Our American Schools, sponsored by the N. E. A. to bring home and school in closer cooperation (NBC Red).

11:00 a.m.-12:00 m. — Young People's Concert, Cincinnati Conservatory of Music alternating with the Symphony Society of New York (CBS).

11:30 a.m.-12:00 m. — Music and American Youth (NBC Red).

5:00-5:30 p.m. — Stories of Industry, sponsored by the U. S. Department of Commerce (CBS).

5:00-6:00 p.m. — Great Plays (NBC Red).

9:30-10:00 p.m. — American Portraits (NBC Red).

10:00-11:30 p.m. — NBC Symphony Orchestra (NBC Red and Blue).

Sunday

12:30-1:00 p.m. — University of Chicago Round Table (NBC Red).

3:00-5:00 p.m. — New York Philharmonic-Symphony Orchestra (CBS).

4:30-5:00 p.m. — The World Is Yours, thrilling adventures in the world of science by the Smithsonian Institution (NBC Red).

¹Except Sunday.

PERSONNEL

Teachers Are Joiners

An inventory of teachers' participation in community affairs taken in one city shows that out of 500 teachers, 50 per cent of them do some church work, 12 per cent sponsor young people's organizations, 10 per cent belong to civic organizations promoting the growth of the city, 12 per cent participate in other civic clubs, 1 per cent are members of the League of Women Voters, 14 per cent are members of the A. A. U. W., and 60 per cent pay dues in fraternal organizations in the community. These figures were given before the Department of Classroom Teachers by Ona C. Raines, a teacher of social studies at Tulsa, Okla.

More Men Teachers

The enrollment of men in the elementary teacher training courses at New Jersey state teachers' colleges has increased from 30 to 192 since 1930, an indication of the increase of men teachers in the elementary school field during the last few years.

Another index to a continuing upward trend is that there are now 1014 men teachers in elementary schools

organized on the eighth grade plan. In 1928, the number was 860.

The trend has been increasing on a nationwide basis since 1920, it has been reported by the U. S. Office of Education. Before that, and back to 1890, the number of men teachers in the elementary schools had been declining. It is thought that the added attraction of a bright prospect for men of advancement from basic classroom experience to administrative work in the elementary field is partially responsible for this increase.

INSTRUCTION

Teacher Interns

The city schools of Omaha, Neb., are experimenting this year with the teacher intern plan. Eight inexperienced university graduates, six holding secondary school teachers' certificates and two holding grade school certificates, conduct three classes daily, observe and assist at a \$3-a-day salary.

School in the Home

An itinerant teacher has been maintained for the last three years by the Munhall School District in Pennsylvania. She visits at the homes of pupils

who are unable to attend schools, assists them with their lessons so that they may maintain their standing in school work and may return with as little loss as possible.

This work is offered to pupils only with the doctor's permission. To some this is the only public school they know. Parents who have taken advantage of this extension of the school into the home attest to the success of this phase of the school's activity.

Stanford's Education Conference

This year the Stanford Education Conference, to be held from July 6 to 10 on the Stanford University campus, will appeal especially to educators interested in youth guidance. Forum sessions during the conference will follow the general theme of social education.

Leading educators who will participate in the program are William Heard Kilpatrick, professor emeritus of education, Columbia University; Lewis Mumford, author and lecturer; William Ogburn, professor of sociology, University of Chicago, and Ray Lyman Wilbur, president of Stanford.

Immediately preceding the Conference on Social Education will be a Conference on Early Childhood Education, July 5 to 6, commemorating the one hundredth anniversary of the founding

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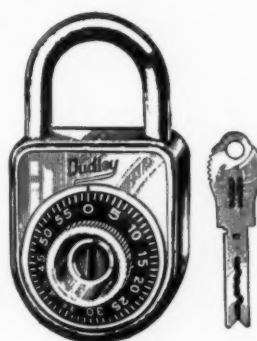
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of the kindergarten. Leaders will be Winifred Bain, Columbia University; Julia L. Hahn, supervising principal, Washington, D. C.; Lois Meek, professor of education, Columbia University, and Professor Kilpatrick.

Sets Four-Year Minimum

Four years of academic and professional preparation as the prescribed minimum of education for elementary teachers has been approved in the form of a recommendation effective Feb. 1, 1943, by the Pennsylvania State Council of Education. While some Pennsylvania school districts now require this minimum, the department of public instruction has allowed sufficient time before the new regulation becomes effective. Teachers in service who hold permanent certificates and students now enrolled in teacher preparation curriculums will not be affected.

Misrepresentation

Extravagant promises of government positions by so-called "civil service schools" that assure the public of success in passing civil service examinations upon completion of their courses have been warned against by the U. S. Civil Service Commission.

Misrepresentations particularly cautioned against by the government were claims that the courses are required, that the schools are given advance information regarding civil service examinations, that they have influence in procuring employment, that they can secure special advantages and that they have been authorized by the federal government to give examinations.

German Youth Education

Adolf Hitler has launched a building program of thirty-two schools which will receive 4000 picked boys a year to be trained in the principles of the National Socialist party. After six years in the Adolf Hitler schools, one-fourth of the boys will be passed on to the four Castles of the National Socialist Order. At the Castles the students will be trained still further, and the best passed on at the age of thirty years to the party university being built in the Bavarian Alps, where they will receive final training in National Socialist principles.

Camping in the Curriculum

The relationship of camping to the public school curriculum was considered in a panel session at the annual convention of the American Camping Association, March 3 to 5, in New York. Panel members who spoke included Goodwin B. Watson, Columbia University; George H. Chatfield

and Mark McCloskey of the New York public schools; Fred J. Kelly, U. S. Office of Education; Rollo G. Reynolds, Horace Mann School, and Mrs. Mable Hawkins, Little Red Schoolhouse, New York City. A commission in New York already has been appointed to investigate the inclusion of camping in the public school curriculum following the example of the schools in Atlanta, Ga., where camping has been established as a subject.

Summer Workshops

To plan the high school of the future the Progressive Education Association is reported to be searching the country for 500 of its finest teachers to develop scientifically a curriculum that will meet the needs of the pupils. Summer sessions will be held in four "Summer Workshops," equivalent to advanced schools of education, for the six weeks' period from June 29 to August 9. These workshops will be conducted at Sarah Lawrence College, Bronxville, N. Y.; Colorado College for Women, Denver; Mills College, Oakland, Calif., and one in the southeastern part of the United States, yet to be announced. Teacher applications for admission should be sent to the association headquarters, 310 West Ninetieth Street, New York.

Handicapped Wins Honor

Frederic Traver Neuman, blind student at Hobart College, Geneva, N. Y., was the only member of the junior class elected to Phi Beta Kappa this year. He is led about the campus by his seeing eye dog, "Paix," gets his studies through the assistance of student readers, his talking book and special volumes in the Braille system.

ANNIVERSARIES

Better Parenthood Week

To impress parents with their duties to their children at home, in school and in all other departments of their lives, Better Parenthood Week is being inaugurated the first week of May to link Child Health Day, May 1, and Mother's Day, May 8, in a new observance. The week is being sponsored by *Parents' Magazine* in cooperation with a nationwide committee of parent educators.

For Better Understanding

Public Schools Week has proved highly effective as a public relations enterprise for the schools of California over a period of eighteen years. This year its observance is scheduled to begin on April 25. Suggested activities of the California State Department of

Education emphasize a maximum of pupil participation and informal programs depicting daily school activities.

NAMES IN NEWS

Superintendents

DR. E. E. OBERHOLTZER, superintendent of schools, Houston, Tex., has been tendered the longest term contract allowed under state law, five years, marking his fifth term as head of Houston schools.

ROBERT G. HUEY, superintendent of city schools at Flemingsburg, Ky., recently was named city superintendent of schools at Paintsville, Ky.

DANA M. KING, principal of the senior high school at Glens Falls, N. Y., since 1931, has been named superintendent at Hudson Falls, N. Y.

J. ELLIS BELL, principal of the high school at Clairton, Pa., became superintendent of schools at Ellwood City, Pa., on March 1.

HARRY O. JOHNSON, superintendent of the Bessemer Township schools, Ramsay, Mich., for the last year and one-half, has been tendered a three-year contract, beginning July 1, by the local board of education.

JOSEPH A. FITZGERALD has signed a contract as superintendent of schools

at New Haven, Conn., for the second year.

GEORGE H. LITTLE, principal of the senior high school, has been promoted to the superintendency of the public schools of Adrian, Mich. He succeeds E. J. REED, who resigned a month ago.

CHARLES H. OBYE was named successor to FLOYD A. CONNER as superintendent of schools, at Akron, Iowa.

GEORGE J. OLIVER, who has been serving as superintendent of schools in Henrico County, Virginia, has been named successor to J. L. B. BUCK as Virginia state supervisor of secondary education.

WILBUR ROWE, superintendent of schools, Milwaukie, Ore., has been appointed a member of the state textbook commission.

JEROME BURTT has been reelected superintendent of schools at Fitchburg, Mass.

JESSE J. CORRELL, superintendent of schools, Lancaster County, Nebraska, was elected president of the Nebraska County Superintendents' Association recently at the organization's convention. Other officers elected were: vice president, EDWIN M. WIELAND, Clay Center; secretary, ELSIE M. ROTH, Valentine; treasurer, L. H. MESSER-SMITH, Stockville, and sergeant-at-arms, CLYDE F. MAASE of Minden.

New Headmasters

DR. SAMUEL C. SHELLABARGER, author and a former member of the Princeton University faculty, has been named headmaster of the Columbus School for Girls, Columbus, Ohio. He will succeed MRS. CHARLES F. W. McCLURE, headmistress for thirty-four years.

THOMAS C. BURTON has resigned as headmaster of the Brunswick School, Greenwich, Conn., to complete the Ph.D. degree at Harvard University graduate school of education. He will be succeeded by WILLIAM L. HENRY, master in Latin at Brunswick for the last ten years.

MIRIAM TITCOMB, headmistress of Hillsdale Country Day School near Cincinnati, resigned recently. She will be succeeded by FLORENCE E. FESENDEN, head of the mathematics department at the Buckingham School, Cambridge.

FREDERICK WINSOR, headmaster of Middlesex School, Concord, Mass., since he founded it in 1901, has announced his retirement next September. His place will be filled by LAWRENCE TERRY, assistant headmaster at Noble and Greenough School at Dedham.

Principals

WILFRED H. MOODY, principal of the Bassett Junior High School, New Haven, Conn., has been appointed

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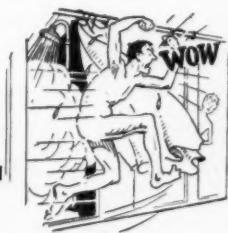


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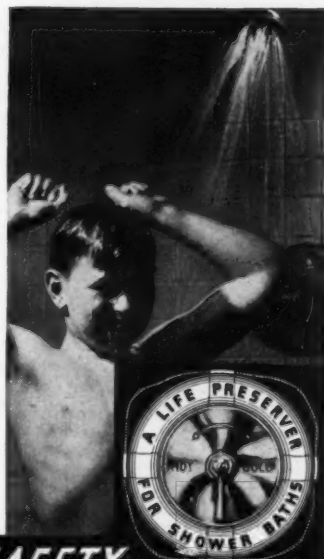
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principal of the Hamden High School, Hamden, Conn. He succeeds Dr. HERBERT A. LANDRY, who resigned last November to become research director to the New York City Board of Education.

CHARLES MACKEY SHARP, vice principal of Emmerich Manual Training High School, Indianapolis, since 1926, has been appointed principal of the Thomas Carr Howe High School, now under construction in that city.

W. R. TEETERS has been assigned as acting principal of the Dozier School, St. Louis, to fill the vacancy caused by the appointment of E. H. BEUMER as acting assistant principal of Roosevelt High School. Mr. Beumer was transferred to take the place of C. H. SACKETT, who was made acting principal of Southwest High School.

JOHN MANION has been appointed vice principal of the Chapman Technical High School, New London, Conn.

JANET CRAWFORD, a member of the faculty of the Girls' Latin School, Boston, has been named principal of the Franklin School, Buffalo, N. Y., succeeding BERTHA A. KEYES. Miss Crawford will assume her new duties with the opening of the autumn term.

PALMER S. RUTHERFORD was designated acting principal of William King High School, Abingdon, Va., recently,

to succeed Roy E. KYLE, who resigned to become superintendent of schools, Carroll County, Virginia.

FREDERICK W. CRUM for two years principal of the Burnt Hills-Ballston Spa Central School, Burnt Hills, N. Y., has announced that he has signed a contract to become supervising principal of the Whitesboro Central School, Whitesboro, N. Y.

EMMETT ANDREWS, vice principal, has been named principal of the Cambridge High School, Cambridge, Md., to succeed R. FLOYD CROMWELL, now state director of educational and vocational guidance.

CHALLISS FRANKLIN, principal of Otego Central School, Otego, N. Y., has been named principal of Oxford High School, Oxford, N. Y., succeeding WILLIAM L. SOPER, who resigned.

JAMES A. CRONIN, principal of the Briscoe Junior High School, Beverly, Mass., has been elected principal of the Lincoln Junior High School, Malden, Mass.

In the Colleges

Dr. J. ADAIR LYON will succeed Dr. EDWARD A. BECHTEL, who retired last September, as director of the Tulane University summer school.

Dr. LEONARD CARMICHAEL, dean of the school of arts and sciences at the

University of Rochester, has been named seventh president of Tufts College, Boston, succeeding the late Dr. JOHN ALBERT COUSENS.

Dr. JOHN W. WITHERS, dean of the school of education at New York University, will retire in September upon reaching the age of seventy. Doctor Withers went to N. Y. U. in 1921 and soon afterward launched a \$3,000,000 program which included an increase in the teaching staff and construction of twelve new buildings.

DEAN KARL C. LEEBRICK of Syracuse University has been appointed president of Kent State University, Kent, Ohio, succeeding JAMES O. ENGLEMAN, who is retiring in June. Dean Leebrick has been head of the college of liberal arts at Syracuse for the last ten years.

Miscellaneous

AGNES SAMUELSON, Iowa state superintendent of public instruction, has announced that she will retire from office at the end of her present term, Dec. 31, 1938. Miss Samuelson will become executive secretary of the Iowa State Teachers Association at the beginning of the next calendar year, succeeding CHARLES F. PYE.

Dr. ALBERT A. OWENS, assistant director of school extension, Philadelphia, will assume the duties of the former

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director of the extension division, WILLIAM HENRY WELSH. Mr. Welsh has been recommended for permanent appointment as associate superintendent of schools.

ALICE POWER has been transferred from her post as principal of the Washington Irving Elementary School, San Francisco, to become director of educational functions, representing the San Francisco Public Schools at the Golden Gate Exposition.

JULIA WETHERINGTON, supervisor of grammar school grades in the schools of Arundel County, Maryland, recently resigned to accept a post with the North Carolina State Department of Education.

DR. HELEN K. MACKINTOSH of Oxford, Ohio, has been appointed to the position of senior specialist in elementary education in the U. S. Office of Education.

PROF. B. FRANK KYKER, head of the department of secretarial science and director of commercial teacher training at the Woman's College of the University of North Carolina, has been appointed research specialist in commercial education for the U. S. Office of Education.

ROBERT C. MOORE, executive secretary of the Illinois Education Association for the last twenty-three years, has announced his retirement as of June 30.

FRANK GREGOR JR. of Ditto, Inc., was elected president of the Associated Exhibitors at the annual meeting held during the Atlantic City convention of the A. A. S. A. J. W. CAMPBELL of Kewaunee Manufacturing Company was chosen vice president and PAUL L. CRABTREE of Caproni Galleries was re-elected secretary-treasurer. New directors elected were A. M. STONEHOUSE of Royal Typewriter Company and F. B. AVERY of American Book Company.

Deaths

DR. WILLIAM A. WIRT, whose "Gary plan" has been applied in many cities and has influenced numerous school systems that did not adopt it in full, died March 11 at the age of sixty-four years. Physicians said that Doctor Wirt died of heart disease probably caused by overwork. Doctor Wirt had been superintendent of schools at Gary, Ind., since 1907.

DR. ALLEN S. MARTIN, for fourteen years supervising principal at Haddonfield, N. J., died recently of heart attack.

FREDERICK WILLIAM GATES, assistant principal of North High School, Minneapolis, more than twenty years, died recently.

HENRY TUCKER SINGLETON, superintendent of schools of Calhoun County,

Georgia, for more than twenty-one years, died recently after an illness of several weeks. He was a member of a family of educators, being a brother of DR. GORDON SINGLETON, president of Mary Hardin Baylor College, Belton, Tex.

GEORGE B. CLARKE, superintendent of schools for eighteen years at Pepperell, Dunstable and Tyngsborough, Mass., died recently in the Worcester Memorial Hospital, Worcester, Mass. On his returning home from the American Association of School Administrators' convention in Atlantic City, he was taken from a train passing through Worcester and removed to the hospital where it was found that he was suffering from peritonitis.

CHESTER F. SCHROYER, superintendent at Emporium, Pa., died suddenly from a cerebral embolism.

MRS. HERBERT BOOTH, principal and teacher of history at the Gladwin High School, Gladwin, Mich., died recently from a heart attack.

J. ELLWOOD CALHOUN, principal of Simon Gratz High School, Philadelphia, died recently at the age of 53 years.

REV. DR. SAMUEL SMITH DRURY, rector of St. Paul's School, Concord, N. H., died in his sixtieth year. Doctor Drury had been rector of this boys' preparatory school since 1911.

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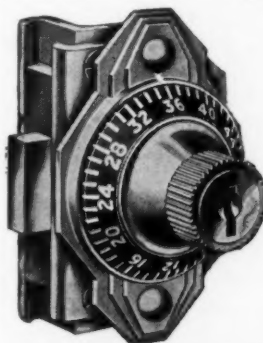
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THE BOOKSHELF

THE UNITED STATES: A GRAPHIC HISTORY. By Louis M. Hacker, Rudolf Modley and George R. Taylor. *The Modern World Series*, No. 1. New York: Modern Age Books, Inc., 1937. Pp. 242. \$0.75 (Paper Cover).

An unusual presentation of the progressive development of the United States with all of the significant information presented by Modley graphic methods.

A FIRST COURSE IN STATISTICS. THEIR USE AND INTERPRETATION IN EDUCATION AND PSYCHOLOGY. (Textbook and Study Manual.) By E. F. Lindquist. Boston: Houghton Mifflin Company, 1938. Textbook, Pp. xi + 226. \$2.25. Study Manual, Pp. 122. \$0.80 (Paper Cover).

The Socratic method applied to learning rather than memorization in an elementary course in statistics.

A CENTURY OF BOOK PUBLISHING, 1838-1938. HISTORICAL AND PERSONAL. By John Barnes Pratt. New York: A. S. Barnes and Company, 1938. Pp. 56. Brief narrative of the vicissitudes of a century in the publishing of books.

CONQUEROR OF THE SEAS. THE STORY OF MAGELLAN. Illustrated. By Stefan Zweig. New York: The Viking Press, 1938. Pp. xv + 335. \$3.50.

Magellan's great venture appears again in a dramatic setting and style that make this valiant Portuguese stand out clearly from the dimness of the past. Effectively translated and deserving of a place in secondary school libraries.

WORLD HORIZONS. THE MAGAZINE FOR YOUNG PEOPLE. Edited by Joseph B. Egan. Wellesley, Mass.: The Welles Publishing Company. \$3.50 per year; \$0.35 per copy.

New publication for young people, filling a sound need for modern reading.

CONSTRUCTION OF SCHOOL BUILDINGS AND IMPROVEMENT OF EXISTING STRUCTURES. Prepared by the Engineering Staff of the National Board of Fire Underwriters. New York: The National Board of Fire Underwriters, 1938. Pp. 22 (Paper Cover). Manual governing elements of safety essential to school plant construction.

WHY PAY TAXES? By David Cushman Coyle. Washington, D. C.: National Home Library Foundation, 1937. Pp. 182. \$0.25.

Taxation reduced to simple, easily understood terms for popular consumption. Recommended for adult reading.

PAYING FOR OUR PUBLIC SCHOOLS. By Frank W. Cyr, Arvid J. Burke and Paul R. Mort. *Modern School Series*. Scranton, Pa.: International Textbook Company, 1938. Pp. x + 197. \$2.

Nontechnical elementary treatment of school finance; valuable for adult education groups.

PUPIL RATING OF SECONDARY SCHOOL TEACHERS. By Roy C. Bryan. *Contributions to Education*, No. 708. New York: Bureau of Publications, Teachers College, Columbia University, 1937. Pp. vi + 96. \$1.60.

Study of the value of pupil rating for the improvement of teaching.

SOCIAL BEHAVIOR AND CHILD PERSONALITY. AN EXPLORATORY STUDY OF SOME ROOTS OF SYMPATHY. By Lois Barclay Murphy. New York: Columbia University Press, 1937. Pp. viii + 344. \$3.50.

Interesting presentation of experience with preprimary children in a relatively unexplored field. Recommended for elementary teachers and principals.

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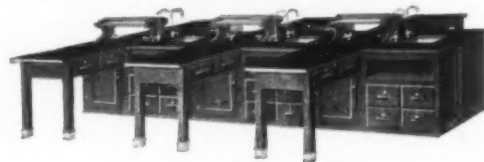
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THE DEVELOPMENT OF LINGUISTIC SKILL IN TWINS, SINGLETONS WITH SIBLINGS, AND ONLY CHILDREN FROM AGE FIVE TO TEN YEARS. By Edith A. Davis. Minneapolis: The University of Minnesota Press, 1937. Pp. x + 165. \$2.

Only children are definitely superior to siblings and twins, according to the findings of this research.

A CRITICAL ANALYSIS OF THE FUEL MANAGEMENT PROGRAM FOR SCHOOLS. By Ashley M. McCullough. Contributions to Education, No. 713. New York: Bureau of Publications, Teachers College, Columbia University, 1937. Pp. viii + 141. \$1.85.

Development of a program for better fuel management based upon the author's research.

JUST OFF THE PRESS

WINGS OVER ASIA. A GEOGRAPHIC JOURNEY BY AIRPLANE. By Lowell Thomas and Rexford W. Barton. Philadelphia: The John C. Winston Company, 1937. Pp. xiv + 399. \$1.20.

THE WONDER BIRD AND OTHER STORIES. By Clara G. Rowley. Illustrated by Joyce L. Brisley. Boston: Bruce Humphries, Inc., 1934, 1938. Pp. 60. \$1 (Paper Cover).

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A recently published catalog, which gives details and specifications of the various types of folding partitions, is at the disposal of any who care to have it.

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While vocational courses are shaping the destinies of future builders and mechanics, said builders and mechanics can be doing a little shaping on their own hook with the new Model W-110 Shaper recently announced by the Yates-American Machine Company, Beloit, Wis.

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School Art on Exhibit

That was an art exhibit, indeed, that the Binney & Smith Company sponsored at Rockefeller Center, New York. The third annual show of its kind, it proved to be the biggest and best with the list of exhibitors running well above one thousand. The pictures were selected from the work done in public, private and parochial schools in every part of the United States by children

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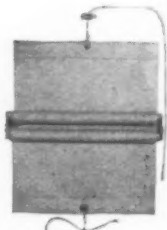


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from the ages of 2 to 18 years. Subject matter in many instances represented personal experiences and contacts in the life of the child, evincing true art expression. Water colors, wax crayons, finger paint, powder paint, colored chalk, pastel crayons and pressed crayons were prominent among the art mediums used. The crowds which thronged the galleries during the two weeks of the show attested the growing interest in art education.

Uses for Radio

The Radio Uses family is flourishing like the green bay tree. The two members of this family of particular importance to schools are Curricular Uses and Extracurricular Uses; between them they have more descendants than the old woman in the shoe.

In case school administrators have never stopped to count all the members of the Radio Uses tribe, the Allied Radio Corporation, 833 West Jackson Boulevard, Chicago, has obligingly done it for them, and put the results of its research into a chart entitled "Using Radio-Sound Equipment in the School." Uses of centralized sound systems, radio receivers, phonograph equipment, recording units and intercommunication systems are diagrammed for all of the modern

school's activities. School authorities are thereby enabled to estimate in advance specifically how the individual school may adapt radio to its own needs. The chart will be sent free on request.

Special Disk Sander

The annual crop of potential shoe clerks and grocery hikers turned out by the high schools is, we predict, going to become slimmer and slimmer as more pupils are "vocationally guided" into the paths of mechanical and industrial work by way of shop and industrial arts courses.

Among the tools that are offered for the training of aspiring young craftsmen is a special disk sander, manufactured by Skilsaw, Inc., 3310 Elston Avenue, Chicago. The new model has been developed particularly to provide an efficient tool for intermittent grinding of light welds, for sanding in repair work and for auto body and fender repair work.

Generalities

Birmingham and Prosser Company, 128 South Sangamon Street, Chicago, announces that Katherine Schenk is in its educational department as assistant to Mrs. N. M. Ingham, director. Miss Schenk's headquarters will be at

the general offices in Chicago but her activities will extend over the entire United States, with attendance at the national and sectional art meetings. Miss Schenk was formerly associated with the American Crayon Company. . . . Summer training courses, open to qualified teachers of automotive mechanics in high schools and colleges, will again be offered at the General Motors Institute at Flint, Mich., this year. Two identical sessions of four weeks each have been arranged to accommodate the applicants, the first starting June 27 and ending July 22, the second starting July 25 and running through August 19. Instruction covers automotive specifications and adjustments, vocational guidance information, service methods and procedure and actual shop training. . . . A new member of the staff of the Gregg Publishing Company, New York, is Albert Stern, special school representative of that organization. Mr. Stern was for thirteen years with the Burroughs Adding Machine Company where he had charge of sales to educational institutions. For the last ten years, he has taught a course in methods of teaching office machines in the School of Education, College of the City of New York. He is co-author of "Office Practice — A Laboratory Project," and "Key Driven Calculator Course."

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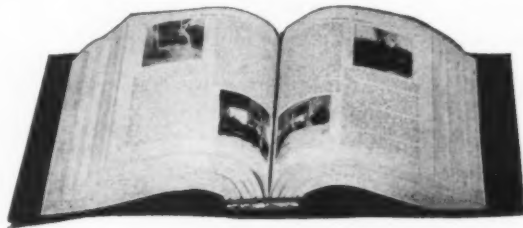


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A STRIKING example of modernism in school architecture is the new Wellington C. Mephram High School at Bellmore, N. Y. We plan to take you on a tour of it next month. There is a quiet magnificence about this building. Clear-cut lines, plain surfaces and creative massing and proportioning make its exterior esthetically satisfying. Its 21-acre site, its tasteful interiors and its smart equipment make the journey time well spent. Frederic P. Wiedersum, architect of Valley Stream, N. Y., planned it. Floor plans and handsome photographs furnish guide service for the tour.

EASTERNERS driving down to Florida on U.S. 15A pass by an attractive high school in Bishopville, S. C. There is a new Negro school for elementary pupils in the same town. Supt. C. M. Stuart will tell a little about both schools in the June issue. The architect, H. D. Harrall of Bennettsville, furnishes floor plans and photographs. These are not large schools or expensive ones.

THE theater is not dead, not in the state of Washington. Led by a small group in Seattle, it has been put on wheels and is being taken to schools all about the state. The first play that went on tour was a sell-out; as on Broadway so in the Pacific Northwest William Shakespeare is good box office. The "Comedy of Errors" was thus the first stage play that many high school pupils ever saw. Straightway they clamored for more. The story of the Washington State Theatre has been put down for THE NATION'S SCHOOLS' readers by George

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E. Murphy, an English instructor in the Broadway High School, Seattle. It will appear in June.

DOES auditing service involve control of school policies? This question will be answered in the next issue from the point of view of Edgar L. Morphet, director of administration and finance of the Florida State Department of Education. A second article on auditing service by the same author will follow in July.

ASETUP for a visual education department in a large high school is to be outlined next month by a man who speaks with authority. He is Charles A. Gramet, who teaches visual instruction at the College of the City of New York and who is chairman of the department of biology and general science at Franklin K. Lane High School, Brooklyn, N. Y.

DURING the summer a number of schools will install indoor swimming pools. It will be worth while, we think, for administrators and architects to read what Francis R. Scherer will say about costs and construction in the June issue. Architect Scherer is superintendent of school buildings in Rochester, N. Y., where eight high school pools are now in operation. In the July issue, he will continue the subject with an article on pool operation, including rules and regulations for control adopted by the Rochester board of education.

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LOOKING FORWARD

Propaganda

THE effect of propaganda on the education of the immature has been pointed out frequently by educationists, sociologists, psychologists and political scientists. Realization of its dangers has resulted in the general attitude of the professional educator toward possible federal control of education through subventions that might influence program. The possibility of government agents using the schools for the dissemination of their professional ideas or the extension of party concepts or bureaucratic desires into the curriculum has been clearly foreseen. These dangers are ever with us and require today even more careful consideration than at any previous time.

It remained, however, for a psychologist to study the actual effects of propaganda upon the immature. Prof. Herman H. Remmers, Purdue University, conducted extensive experimentation with children in small high schools. His conclusions have been published in the *Public Opinion Quarterly* of Princeton University.

Doctor Remmers' findings are significant. Children of high intelligence appear to be as significantly affected as children of low mentality. Successive retests indicated that at the end of six months the effects of propagandistic teaching were still in high evidence. In schools in which actual pupil participation in school government had been practiced the ease in teaching certain types of propaganda was considerably modified.

The Remmers study should be followed by similar and more intensive experimentation in different areas of the country, both for verification through duplication and for the education of the teaching profession to the dangers of propagandistic efforts.

These findings lend much weight to the belief of the Institute for Propaganda Analysis that one of the important curricular needs is for teaching means of detecting and combating propaganda.

Questions and Answers

PUBLICATION of the report of the Advisory Committee on Education has resulted in a barrage of questions from educators and laymen alike. An attempt

will be made each month to present and answer at least one significant query.

One question, repeated many times in other forms, follows: "For a number of years you have preached against federal aid and the dangers of federal control. Now you sign a report that provides definitely for ultimate federal control in certain fields. Have you changed your point of view? Are you willing to back specific legislation growing out of this report? We who have believed in your earlier stand would appreciate a frank and honest answer."

The request of the President in his instructions to the committee was to ascertain the effectiveness of operation of existing federal legislation to education and to consider desirable federal relations to education. This job the committee accomplished and the report should be considered as *advisory* in nature for the information of the President and the Congress. The committee's studies indicated that undesirable federal control over vocational education had developed out of the Smith-Hughes Act. It, therefore, promulgated a series of principles governing federal-state educational relations and these principles are at once a significant expression of committee fear and a warning against future dangers. The final recommendations were written in terms of these principles except that specific mandatory requirements were provided to protect Negro education.

It also was obvious to the committee that federal subventions could not be given without the exercise of certain controls, despite the assumptions of certain educators to the contrary. While the federal government gave land in earlier days to the states for educational purposes without any controls or accounting, the experience with this practice led to a definite change in policy in 1890 and in 1917. It is impossible to secure federal legislation today that will not exercise certain controls over subventions to the states.

If the recommendations of the committee could be written into federal statutes in complete harmony with these earlier mentioned principles of federal-state educational relationships, the result would be defensible.

Previous study of federal-state educational relationships and the current policies of the Congress with respect to state grants led us to reject assumptions that

federal aid could be given without control. Today, after two more years of intensive study of these relationships, we are more than ever convinced that federal aid without control is just a will-o'-the-wisp fancy.

Even if perfect statutory enactment could be given, *executive* interpretation of these statutes would within a decade place considerable power with the federal agencies involved in the administration of the plan. The Smith-Hughes Act, with all its defects, could have been interpreted broadly and without the rather complete control of program that actually developed. It appears to be the history of all federal legislation involving grants that progressive executive interpretation results in greater domination and direction than the original acts intended.

The incorporation of even a 10 per cent grant in the total educational program would have much greater influence than casual examination might indicate.

Recognizing clearly the inevitability of federal control of federal aid in the light of all centralizing tendencies in government, our own conclusion is that the only safe way to obtain necessary federal aid to education is through projects or activities that have a definite termination. In the case of direct aid to the states this would mean appropriations for school buildings. Undoubtedly the federal government would exercise considerable control over the reorganization of administrative areas, building location, educational facilities, methods and materials of construction. Once a building has been completed, the state and the community alone would determine its *use* and its educational program. These controls are absolutely essential to the maintenance of our traditional concepts of education.

The federal government also might equalize economic inequality, a need just as important as the equalization of tax burden, through scholarship grants to capable students in secondary and higher education. The promotion and support of the Schwellenbach Bill, providing aid for school buildings, is the safest and ultimately the best way to secure necessary federal aid.

Questionable Policy

IN A recent bulletin entitled "The Structure and Administration of Public Education in the United States," published by the Educational Policies Commission, the following statement appears on page 11: "It is desirable that the selection of the chief state educational officer, commonly called the commissioner of education or the state superintendent of public instruction, be placed in the hands of a state board of education. The state board of education [*Italics ours*] *should be named by the governor from the state at large and confirmed by the legislature.* The members of the board should enjoy relatively long, overlapping terms, to the end that no governor be required to

appoint a majority of its members during a single term of office."

This statement appears to be much too dogmatic for promulgation as a general policy. The history and tradition of the American educational plan incline quite generally to the development of the education function independent from civil government except that the state legislature is the unitary legislative authority. In some states the controlling board of education is appointed by the governor just as in other states the governor also appoints the chief educational executive officer. However, this minority practice does not appear to give sufficient strength or reason for the promulgation of a specific mandatory statement that the state board of education should be appointed by the governor.

It is entirely possible and feasible to obtain state boards of education with long, overlapping terms by popular election. This practice has prevailed in community districts for generations and in many types of existing state boards. It seems strange that a report which insists on the popular election of community school board members should assume by implication that the people on a statewide basis cannot elect just as capable a state board of education as can the community in its sphere. To assume this condition by advocating only a single plan appears a negation of the principle of democratic competency and smacks more of a theoretical assumption than measured and rational expression of broad policies.

Since it may be harmful to the efforts of certain states that are seeking to perfect the independent school organization from the state as well as the local point of view, it is desirable that the Educational Policies Commission give further consideration to the idea of presenting at least two possible choices in this area.

There may be certain reasons today for favoring the appointment rather than the election of a state board of education, but the evidence for one or the other method is not sufficiently clear to make selection of a single plan desirable. In terms of American practices both methods have both strong and weak points and deserve full consideration. Let us have more rational choice.

William A. Wirt

WILLIAM A. WIRT'S sudden death on March 11 removed from public school administration a man unusually capable in many areas. Doctor Wirt assumed the superintendency of the schools of Gary, Indiana, in 1907 and immediately began experimenting with new forms of elementary school administration. These ideas were startling to conventionally minded educators but already had been tried experimentally in smaller situations. His startling innovations at Bluffton, Indiana, as early as 1900 brought more than passing

interest to him as an individual. When the organizers of the new Gary community schools looked for a man who had ideas and also the courage of his convictions, their choice quickly fell on William A. Wirt.

In Gary he perfected his method of administration of an enriched elementary program by doing something that no administrator had previously seriously studied: the relation of a balanced school plant to the program of education. In many respects William A. Wirt must be given credit for the early practical application of certain functional concepts in school plant planning. His enriched program was quickly nominated the "Work-Study-Play-Plan." The program concept was the application of modern methodology to a life situation, the forerunner of the present activity movement. His practical mind brought him to the quick realization that the administration of this educational program would be expensive unless he could prove satisfactory use of specialized facilities such as shops, laboratories, studios, auditoriums and gymnasiums. The curriculum was built on a balanced plan, departmentalized except for the tool subjects, and a physical plant developed to fit the program.

Because Doctor Wirt was outstanding as an educational publicist for his generation, the educational world soon began to make excursions to Gary. His educational claims resulted in the Gary Survey, under the auspices of the General Education Board, published in eight volumes during 1918. His claims of increased administrative and building-use efficiency brought acid comments from more conventionally minded administrators. However, the idea gradually spread and is today in use as an administrative device in many cities from New York to Portland and also in certain sections of the South, known under such diverse names as "platoon," "rotary," "shift," "duplicate school," "work-study-play-school" and "balanced departmentalization."

In terms of influence on elementary administrative procedure William A. Wirt must be considered as one of the outstanding contributors of his generation. His work has been refined and modified by many other men prominent in elementary education, but to him go the honor and the glory, to say nothing of the rebuffs, that accrue to the courageous pioneer.

Personality peculiarities, including a tremendous inflexibility once a line of action had been decided upon, a difficulty in adjusting easily and gracefully to other members of the profession, an intense preoccupation with his own point of view, complete unconcern for other expressions of opinion and a certain heaviness in writing and oral expression, retarded quick acceptance of even his good ideas. Once imbued with an idea, nothing could shake his complete faith or make him deviate in practice. This lack of social sensitivity brought him his greatest publicity and has also clouded his real achievement. He took little interest in educa-

tional organization and had few close friends in professional circles. He was not a friendly or social person except in certain personal areas.

As a guest at a house party near Washington early in the first Roosevelt administration, he apparently mistook academic theorizing for government policy and became imbued with the idea that the federal administration not only planned the overthrow of our democratic form of government but also planned to use the schools in the consummation of this program. Completely convinced that this was actually the case, he published charges, in which he included some of his best friends, that resulted in a rather pointless congressional investigation. Individuals who believed likewise or who had political axes to grind, encouraged and used him to promote their own programs. His major efforts since 1934 were devoted to writing and talking about his political beliefs.

As the emotions engendered by his later actions fade away and as memory of his personal inflexibilities are smoothed by time, the nature of his real contribution to administrative practice will probably assume a more rational place in the history of education.

New York Reorganization

PUBLICATION of the first section of the Regents' Inquiry or survey of educational conditions and needs in New York State calls specific attention to the fundamental need, which exists not only in New York but in practically all other states, for complete reorganization of archaic district systems as the first step toward better schools and equalized opportunity in terms of both tax burden and program. The survey indicates that New York still has in operation 6000 one-room schools, 400 of them with less than four children and 1700 with between five and nine children. These rural districts could easily be reduced to 600 community areas, a reduction of almost 90 per cent.

The emphasis of this survey on structural reorganization as the first step in improvement is highly desirable. There is much discussion of equalization of educational opportunity today. Equalization is essential but it is difficult to justify the more sentimental point of view that equalization should proceed regardless of the fact that it will merely extend for several more generations current inefficiency and extravagance in educational organization. The survey's recommendations are sound and logical. Structural reorganization is the first step. When these changes have been effected it will be possible more intelligently to study the needs for further equalization of tax burden through larger state subventions.

The Editor

Reports, Annual and Living

WORTH McCLURE



Neither dull nor pompous are the dozens of pictorial annual reports released in the last few years. They may show, for example, how pupils gain practical experience in retail selling in stores.



Part of the beauty crafts program as taught in Seattle schools calls for training in shops serving the general public. Girls learn to be both operators and receptionists in these shops.



Living reports may include a visit by parents to the school auto trades shop to acquaint them with new undertakings in teaching. Civic organizations often are asked to observe activities and offer suggestions.

SINCE the early days of American school system the superintendent's annual report to the board of education has been sanctioned by tradition or statutory requirement—sometimes by both.

These sanctions may be said to have grown chiefly out of appraisal, historic and interpretive values. The annual report has afforded an opportunity for inventory and evaluation of the year's educational accomplishments. It has provided a record of yearly achievement in the public service for school board members. To them it is likewise a useful handbook of information for reference and study in connection with determination of policy or with the dissemination of information to the public. It has sought of recent years to interpret the school service, problems, policies and emerging school needs to the community. Originally this was not a major function of the report. Expediency in the face of rising school costs has dictated its inclusion.

It is the purpose of this article to question the present validity of the third set of values. If it is true that under modern conditions of living the annual report has less practical usefulness as a means of interpretation to the community at large, then the superintendent should recognize this and should plan accordingly.

There can be no reasonable quarrel with the usefulness of the annual report to the schools and to the board of education. The single necessity of annual accounting for funds received and expended in terms of the number of pupils served is sufficient if no other considerations are involved. To this, however, must be added others of less obvious but genuinely practical importance.

Chief among these is the fact that occasional summary and evaluation of accomplishments are definitely useful to the superintendent him-

self. If the board did not require occasional summaries, it would be necessary for the superintendent to formulate them for the use of the schools. Without some kind of appraisal of the educational situation in terms of community needs there would be no basis for intelligent recommendation of new developments to the board.

With few noteworthy exceptions, school boards today render one of the most outstanding public services in American life. Indeed, it might be fairly said that the record of this group of unsung public servants, nonsalaried in most instances, constitutes a hopeful portent for the America of tomorrow.

Board members are often interested in going behind the mere statistics and the concerns of school business and in learning something about the school services. More than that, they are qualified as interested laymen to offer sound advice upon the practicability of education proposals. Therefore, periodic inventories and forecasts of progress, whether in the form of annual reports or not, afford a basis for obtaining practical advice which the superintendent can ill afford to be without. Moreover, the personal contacts of board members are usually wide. It is not only their right as representatives of the people but it is highly desirable for them to be posted on school purposes and achievements.

The case is not clear with reference to the practical utility of the annual report as a means of educating the community about its schools. It may have been true that once upon a time annual reports were widely read, perhaps in the horse and buggy days when the weekly newspaper and the mail order catalog were the principal literary diversions of countless families. In this era of daily newspapers, pulp magazines, tabloids, Sunday supplements and free chain store magazines, it is not so true.

More than ten years ago, Moehlman estimated that about 4 per cent of the public's time was available for self-information. Since then, to the flood of cheap reading, there have been added cheap automobiles, movie-made children and national

radio hookups. If Moehlman was approximately correct in 1927, what chance for an extensive audience does the annual school report have today in the face of this added competition? It may be argued that some

thoughtful persons will still read annual reports of the schools. We may grant this and still question the practical value in these latter days when a popular radio speaker can flood Congress overnight with tele-

Developments in school service may be presented by radio, by the press or by illustrated bulletins. These tailoring students are in constant demand and many of them find jobs before graduation.



Recognizing that many pupils will enter some industry or trade, Edison Vocational High School in Seattle teaches pupils how to operate power sewing machines neatly.



Vocational surveys indicate that there is a growing demand for trained workers in dry cleaning plants. These pupils are learning how to spot and to press in the school shop.



grams upon such an issue as the World Court.

Growing evidence of dissatisfaction with the annual report as an extensive interpretive medium is found in professional literature. Witness the continuing number of articles in professional magazines under such captions as "Making Annual Reports More Effective." Examination of these articles and books on administration shows the recurrence of such suggestions as stressing the public relations functions, using "language easily understood," writing "for the ordinary reader" and employing illustrations and graphs.

Criticism has come not only from professional sources, but from lay sources as well. One puckish contributor to a widely read news magazine refers at length to annual reports as "bumbling literary efforts of the pedagogs, usually dull, often pompous." The same disrespectful con-

temporary calls attention to what he calls an "epidemic of school picture books" which he avers has "assumed the proportions of a national movement." Without debating the merits of this characterization, it may be fairly said that he has called attention to a symptom worthy of investigation.

As a bumbler, I rise to the defense of bumbling. That efforts to extend the appeal of annual reports have borne fruit in the directions intended is evidenced by the fact that at long last they have "made" the columns of the so-called sophisticated press. The pictorial report movement, if it is a movement, may be fairly said to have widened the audience to an extent which cannot at this juncture be prejudged with accuracy. Moreover, the pictorial report undoubtedly has values for the teaching profession somewhat akin to those to be obtained by actual observations of school practice.

In spite of these considerations, however, superintendents should seriously question whether there is adequate justification for elaborate efforts to gain wide community circulation for something that originally was intended principally for the board of education and the schools themselves and that, it must be frankly admitted, is costly and cannot be easily adapted for public consumption without great difficulty

and perhaps some sacrifice of the former values.

The annual report, if it is to be serviceable to the board and the schools, must be comprehensive. It is, therefore, too much to expect that many lay people will take the time to pause and examine it thoughtfully. If the superintendent is courageous, he might even ask how many of his teachers have read his latest "literary effort."

Moreover, the modernized version of the annual report, replete with pictures and graphs, costs too much per copy to make a wide distribution feasible for many school systems. Finally, attempts at popularization may actually weaken its appraisal and reference functions.

If the annual report has restricted usefulness for interpreting the schools to the general public, two questions arise:

1. Why not prepare certain reports at regular intervals, perhaps annually, especially for the board? Increase the emphasis on appraisal and stop trying to make such reports serve a purpose for which they cannot be adapted.

2. Why not develop a continuous plan of interpretation at frequent intervals throughout the year? This continuous interpretation need not be limited to the printed page alone but should include living reports as well, a variety of means which are available at small cost in all communities.

The value of educational appraisal by the superintendent already has been mentioned. The practical utility of this practice is not confined to the superintendent alone. A useful plan is to have each principal report annually to the superintendent the year's achievements in his school community with suggestions for needed adaptations in the program for the year to come. It is equally important that each teacher render a similar service to the principal. It is essential that each specialized service appraise itself annually. The same might be said for the operative and maintenance staff.

Appropriate organization of such reports calls for analytical and constructive thinking upon the part of all concerned. It provides a highly desirable opportunity for general

SEATTLE PUBLIC SCHOOLS BULLETIN

Seattle Schools in Brief

SCHOOLS FOR BOYS AND GIRLS

79 Elementary Schools—Attendance 31,736.
 3 Junior High Schools—Attendance 4,811.
 9 High Schools—Attendance 17,943.
 Civic, 4, Eugene Freeman School—Full-time classes, 265; Part-time, 170.
 School for the Deaf—Attendance 46.
 Another Richard and Martha Washington, paroled schools for boys and girls at danger of becoming delinquents—Attendance 171.
 Night School—Attendance 97.
 Advanced and Vocational Classes—Attendance 728.
 Speech Correction Classes—Attendance 222.
 2 Recreational Reading Centers, where children who have special trouble with reading receive individual help.
 Recreational instruction for crippled children at the Children's Hospital and Convalescent Home, the Swedish Hospital, and young children at home—175.
 Public school classes at the Convention House, Deacons Home, and Race School—50.
 Twenty school for under-age youth in advanced training—1917 Attendance 1510.
 18 School Lunchrooms, serve wholesome lunches at 20¢.
 The School Placement Service finds employment for young people up to 21 years of age.

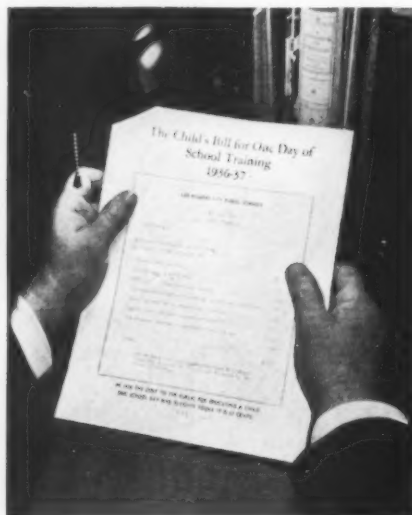
EDUCATION FOR ADULTS

Evening Schools which served 12,007 adults last year:
 Broadway Evening School—Academic, cultural, and trade classes.
 Central Evening School—Academic and vocational classes.
 International Evening School—High school graduates.
 Adult Forums for comparison study of public opinion at five centers throughout the city.

Reports such as these from Seattle, the Bronx and Los Angeles serve many purposes in addition to interpreting the school to the entire community.



Proud to Manage the Machines



participation in administration. If some proposals for change appear more timely than others, basis is thereby afforded for group discussion and consequent broadening of the point of view of all staff members.

In these days of restricted school budgets, therefore, are there not other avenues of school interpretation which avoid the necessity of spending the entire appropriation on one publication and which may pay greater dividends upon the time and money expended? Every superintendent is aware that there are many avenues available, some of which cost little or nothing and which have the added advantage of affording a year-round interpretation.

The metropolitan and the local community press value school news highly at the present time. The "play" given education by leading newspapers, weeklies and magazines is indicative of the fact that the majority of editors are friendly to education and will treat it constructively if well-informed.

Illustrated bulletins, either intensive or extensive in character, carried home from time to time by the pupils and distributed to local mailing lists, have met with success in many communities.

Time for school programs is donated freely by radio stations. The Seattle school system makes no attempt to have school broadcasts compete with professional programs. No commercial program, by the same token, can compete with the school hour in appeal when boys and girls present living cross-sections of school and classroom activities.

Special invitations to community and civic organizations to observe and advise upon some particular undertaking of the schools are interpretive measures.

Invitations were sent last November in the name of the Seattle school board to seventy-four organizations, inviting them to send special committees to visit the Edison Vocational School, a new undertaking. All sections of the city were represented. These committees were specifically requested to report to their members and to send letters to the board offering criticisms or suggestions.

About half the organizations sent committees and a number of excel-

YOUR CHILDREN And Their Schools

INFORMAL REPORT TO THE PATRONS OF THE LOS ANGELES CITY SCHOOLS

Prepared Under the Direction of
VIERLING KERSEY
Superintendent of Schools

ARTHUR GOULD Executive Chairman
HOWARD A. CAMPION Production Manager
ROBERT HILL LANE Editorial Chairman
PAUL A. LUGGIE Photographer
M. E. HARRIS Editor

LOS ANGELES, CALIFORNIA
SEPTEMBER
1937

When reports become a record of achievement in terms of community needs, the board is able to offer practical advice concerning educational proposals.

lent letters were received. All of these letters expressed astonishment that the members had known nothing of this development of school service and all commended its timeliness. In addition, several useful suggestions were made. Thus, with little expense, all sections of the city were informed of important features.

During American Education Week, besides demonstrations of work and exhibits which were attended this year by more than 49,000 Seattle adults, more than twenty major civic organizations requested the schools to present programs at their regular meetings. Besides the improved public understanding that results every year from this special interpretive effort, it is quite apparent in the improvement of offerings over a period of years that the school staff is clarifying its own thinking with regard to basic values.

Another variety of the living report is the motion picture film portraying school activities. Oakland, Calif., and East Lansing, Mich., are school systems that have used this device with considerable success. Many people who cannot be brought to school can be thus made aware of the purposes and activities of modern education. In the former city, films of school activities have been shown in every school and before numerous service and civic organizations.

The foregoing are only a few of the means of extensive interpretation.

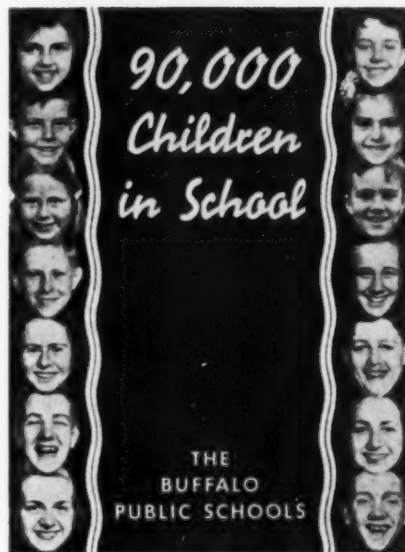
WHICH SCHOOL SHOULD I CHOOSE? WHICH CURRICULUM SHOULD I CHOOSE?

The course for the senior high schools visit the 9A pupils in the junior high schools. A senior high school counselor is discussing with a group of 9A boys the various opportunities in his particular school.

A senior high school counselor is discussing with a group of 9A girls the various opportunities open in the senior high school.



13



Others will occur offhand to many readers. The superintendent has to think not only of extensive but of intensive interpretation. The former is for the public at large, the man in the street and the woman at the radio. It frankly competes for that elusive 4 per cent of the public's time. The latter is chiefly useful to the schools themselves and to the board of education. Its importance cannot be overlooked without serious losses. It has no competitor for it serves a restricted audience.

Small wonder, however, in the face of depression and recession that the two functions have become a bit confused. To shy the annual report at both the extensive and intensive birds by trying to adapt it to both purposes is the hard way. The simpler way is to recognize that there are two problems and to attack each in appropriate fashion.

Commencement's Here

BETTY F. LONGENECKER

MOST every senior English teacher in the smaller high schools is approached by her principal about this time of year and told to do something about a commencement program. High schools have different ways of selecting and preparing commencement speakers. After experimenting with many methods, the high school faculty at Quarryville, Pa., has adopted a plan which has been successfully applied there.

Briefly, the system is this: A theme for the program is chosen and the numbers planned around it. When the theme is announced, each senior is required to write and present a spoken essay developing some phase of it.

Before these are given, seniors who fall within the upper one-third of the class are listed by scoring their report cards. After the speeches have been given in class, ten or twelve of the best speakers are selected. These pupils compete in an oratorical contest, given as one of our assembly programs, with the faculty acting as judges. The faculty selects, according to a point system, the three best speakers, who present their essays at the commencement exercises where they are given achievement medals.

The objection usually offered to this system is that the first three honor pupils, if they are not selected in the oratorical contest, will receive no special recognition. However, we do not publicly announce individual ratings. We list our honor pupils, and the speakers are the best from that group. This lessens the jealousy or bitterness that might arise over a difference of one point in deciding between a valedictorian and a salutatorian.

The English teacher's responsibility is not so much in the choice of speakers as in their inspiration and preparation. She must do something constructive in teaching her pupils how to find material and use it legiti-

mately and how to organize and assemble their own ideas as well as ideas gleaned from reading.

The finding of material gives the English teacher or the librarian in the school a real situation for introducing pupils to the use of the card catalog, the *Reader's Guide*, picture and pamphlet collections and other reference material. Such a lesson on the use of the library is twice as effective when the seniors know that they will need the knowledge to locate material for their essay as it would be if given under an artificial situation. The information becomes doubly important to them, also, when they learn that this knowledge will stand them in good stead later in college or public libraries.

The next step in the process is teaching the pupils to use the material they find in the right way. The average high school senior has few original or startling ideas on many serious topics. His thinking is not mature enough and his experiences are too limited. That being the case, when he has some serious writing to do, his first impulse is to choose some abstract idea and proceed to copy what some deep-thinking philosopher has set down on the subject.

When a pupil who has been doing mediocre work suddenly blossoms into a veritable orator, the English teacher may rightfully suspect but

perhaps not rightfully blame him. He must be taught to translate reference material into his own words. For this, practice in précis writing and paraphrasing must be provided. When a pupil has learned to put into his own words the ideas he gains from reading and to summarize succinctly and accurately basic ideas of others, he is well on the way toward doing some constructive thinking. The value of such training cannot be overemphasized. It aids in clear thinking, vocabulary development and comprehensive reading.

The choice of a subject and its arrangement follow. If a definite theme for the program has not been decided, seniors are encouraged to choose concrete topics that lie close to their interests or that are of local origin. One of the seniors this year has chosen for her topic the Lancaster County Farmers' Market. Another has chosen the Amish for her discussion. These pupils are learning local history.

When all available material has been gone over, the oration is definitely planned in outline and finally written. If possible, the writing should be done in class under the supervision of the teacher. Once a pupil has had this experience in locating material, planning an outline, writing and memorizing his essay, he has the satisfaction of knowing that he has accomplished what seemed to him at first a dull and difficult task. He feels rewarded.

A senior English teacher of the Quarryville school district in Pennsylvania describes a successful program for commencement. All seniors prepare spoken essays, preferably on a local theme. From this group the three best speakers become the commencement orators

Two Hundred Curriculums

THE curriculum and courses of study in 200 secondary schools constitute one of the major areas surveyed by the Cooperative Study of Secondary School Standards during 1936-37. The term "curriculum" is here defined as the total organized subject matter offering of the school; courses of study are defined as offerings within given subject matter fields.

Four general phases considered were: (1) general provisions of the curriculum; (2) sources for revision and development of the curriculum and courses of study; (3) organization and procedure for revision and development of courses and curriculum, and (4) courses of study in twelve major fields.

Each of these four phases was checked by means of lists of criteria and then evaluated. A total weighted score for the curriculum and courses of study was determined for each school. Norms also have been calculated for each of the six regional associations; for very large, large, medium-sized and small schools; for public and for private schools; for accredited and nonaccredited schools for (1), (2) and (3) above, and for each of twelve major teaching fields in (4) above.

The work of the Cooperative Study is naturally of greatest immediate value to the 200 schools studied. Each of these schools will know exactly where it stands, enabling the school to determine its elements of strength and of weakness. The fact that a school does not offer certain courses or that it ranks low in one or more fields does not necessarily mean that it should offer additional courses or develop weak courses or departments. The school must first determine its particular needs and its obligations to its pupils; these are prime considerations for every school. In light of these, its relative ranking with other schools becomes significant and its program of improvement should be developed.

The value of the materials developed by the Cooperative Study is not, however, limited to the 200

Private schools excel in foreign languages. Public schools are better in practical courses and the arts. Compare your own curriculum with the 200 here reviewed and you will see where improvements in program can be made

M. L. ALTSTETTER

schools. Every school can use the material to study and evaluate its own curriculum and courses of study, to determine its weak and its strong elements and thus to formulate its program for improvement. These methods, with some modifications, are being used by the Cooperative Study as a basis for improved accreditation procedures which it will recommend to the regional associations.

Comparisons of the norms show some interesting facts. Private schools, on the basis of these norms, are definitely better than public schools in the following respects: general provisions of the curriculum, English, foreign languages, mathematics, science, social studies, and health and physical education. On the other hand, public schools are considerably better than private schools in organization and procedure for revision and development of courses and curriculum, music, arts and crafts, industrial arts, home-making, agriculture and business education or commerce.

In general, the private schools as a group rank higher in the academic subjects, and the reverse is true in nonacademic subjects, health and physical education excepted. Private

schools commonly restrict their curricular offerings more than public schools; the former meets the needs of a limited patronage for fairly specific ends, the latter being obliged to meet the needs of the general public, cost being the chief restricting agency. The greatest superiority of the private schools over public schools is in foreign languages. Superiority of public schools over private schools is greatest in home-making.

Does size of school have any influence on quality or extent of curricular offerings? This is an old question. With a few minor exceptions, the norms for the fifteen elements decrease as one proceeds from the very large school (more than 1000) through the large (500 to 999) and the medium-sized school (200 to 499) to the small school.

When subjects are compared it is found that English ranks lowest in quality while agriculture ranks highest, English being offered in all the schools and agriculture in exactly half of them. Second highest was arts and crafts, in 135 schools, and second lowest was science, in 200 schools.

In addition to checking and evaluating itself in the various aspects of the curriculum and courses of study, each school was also requested to answer the following questions: (1) what are the best elements or characteristics of the curriculum and courses of study; (2) in what respects are they least adequate or in greatest need of improvement; (3) in what respects have they been improved since September 1935; (4) what improvements are now being made or planned for the immediate future, and (5) what studies has the school made in this field since September 1934 or is it making at the present time?

Answers to these questions not only provide stimulation for the school and additional opportunity for self-evaluation, but also give some evidence of what has been done by way of correction, what is being done and planned and the ex-

Table 1—Respects in Which Curriculums and Courses of Study Are Regarded as Best and as Least Adequate

Rank	Best Provisions	Times Mentioned	Rank	Least Adequate Provisions	Times Mentioned
1	Flexibility or provision for individual differences	72	1	Flexibility or provision for individual differences	61
2	Comprehensiveness or variety of offerings	46	2	Correlation or integration of subject matter fields	21
3	Preparation for college	24	3	Vocational training	19
4	Provision for electives	22	4.5	Meeting requirements and restrictions by colleges	16
5	Meeting needs of community	19	4.5	Provision for pupil participation and interests	16
6	Provision for pupil participation and interests	18	6.5	Business education	15
7	Thoroughness of offerings	16	6.5	Arts and crafts	15
9	Citizenship and character training	11	8.5	Industrial arts	13
9	Education for life situations	11	8.5	Education for life situations	13
9	Correlation or integration of subject matter fields	11	11	Physical and health education	12
			11	Curriculum study or revision	12

tent to which the school is studying its own curricular problems.

Answers to the foregoing questions were tabulated for each of the twelve subject fields as well as in thirty-five other respects mentioned by the schools. In order that the reader may see for himself what schools think of their curricular offerings table 1 is given, showing "best" and "least adequate" elements in parallel columns.

Ranking first in both lists is flexibility or provision for individual differences. A number of schools indicated this trait as best in some respects and as most inadequate in others. Three other items are found in both columns, while preparation for college is a virtue in 24 schools but is a millstone in 16 others.

It is noteworthy also that none of the general subject fields is found in the "best" list but four of them are in the "least adequate" column. An overlapping between vocational training on one hand and business education (commerce) and industrial arts on the other is evident. Vocational training includes not only the other two subjects named but courses in homemaking and agriculture as well.

Table 2 summarizes some of the responses made to questions 3 and 4 concerning improvements that have been made or are being made. Of the ten improvements named as made since September 1935, eight are in subject matter fields, and of the eleven listed as now being improved or planned for, eight are in

subject matter fields. Seven of these fields are found in both lists. Omitted from both lists are foreign languages (which seem to concern schools less than any other subject), agriculture and arts and crafts. It will be recalled that arts and crafts is found in table 1 in the "least adequate" list. This, together with the fact that many schools not offering this work should do so, would indicate that this field should be marked for improvement.

It may be worth noting that the total number of times "best elements" are named is 349, and that 26 of the 200 schools mention no "best elements" whatever; "least adequate" elements total 376 and 25 schools mention no such elements; improvements made since September 1935 total 354 and improvements being made or planned, 295; 39 schools claim no improvements made and 44 are making none and planning none.

Almost exactly half the schools, 99, reported no studies made since September 1934. Of the other 101 schools, 43 reported that they had studied or were studying the general problem of curriculum making or revision, 19 had studied or were studying one or two of the general subject matter fields, and the rest, other curricular matters. Unfortunately, only a few reports indicated as studies really merit the dignity of the term.

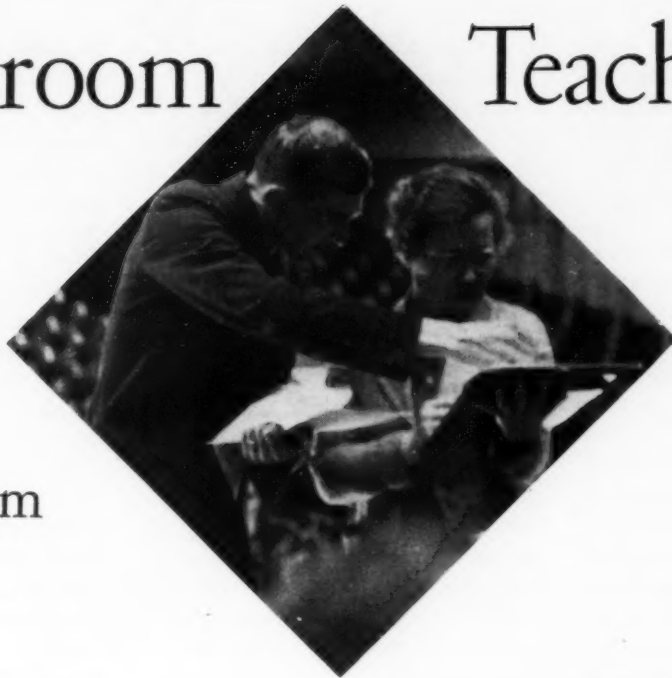
Probably as significant as the things listed in the foregoing tables are other matters that were seldom mentioned in any of the respects already discussed. Educational literature and discussion of the past few years have emphasized matters one might expect to be included quite often in one or even several of the lists.

Safety education was mentioned no more than three times; emphasis on a "functional" curriculum, only four times; education for leisure, only three times; visual education, six times; stimulation of creative work, only twice; and remedial work of any kind, only 15 times. One might also properly expect that more concern would be manifested regarding provision in the curriculum for orientation, or courses primarily of guidance value.

Table 2—Improvements Made or Planned in the Curriculum and Courses of Study

Rank	Improvements Since Sept. 1935	Times Mentioned	Rank	Improvements Being Made or Planned	Times Mentioned
1	Social studies	27	1	Curriculum revision	29
2	Business education	25	2	Industrial arts	22
3	Music	22	3	Social studies	21
4	Flexibility or provision for individual differences	21	4	Homemaking	20
5	Curriculum revision	20	5	Business education	17
6.5	English	18	6	Health and physical education	15
6.5	Sciences	18	8	English	12
8	Homemaking	17	8	Sciences	12
9	Health and physical education	16	8	Correlation or integration of subject matter fields	12
10	Industrial arts	14	10.5	Mathematics	11
			10.5	Guidance facilities	11

A Classroom Teacher's View



of Curriculum Revision

HELEN SPARKS

WHEN a superintendent considers curriculum revision in his school, he is likely to find that the further he goes into the problem the more complicated it becomes. The following sources of information are open to him: He may refer to the yearbooks of the N.E.A. and he may collect the published accounts of schools that have been working in the field of curriculum revision; he may take courses in summer school and require his teachers to do so, and he will certainly survey conditions in his own school. Having finished these preliminaries, he will undertake to summarize his work. It is then that he will find himself confronted with an angle not usually mentioned.

Certain factors affect teachers' points of view toward curriculum revision. Time allotment and curriculum revision cannot be separated. Among these factors are: legal limitations, professional limitations and limitations neither professional nor legal.

Legal limitations are effected chiefly through the state departments and budget commissions. The state departments regulate the amount of time allowed for school, the subjects taught, the grades in which they are to be taught, the textbooks to be used in the teaching and the qualifications for certificates or licenses in various teaching positions. In some states a ratio between the number of pupils enrolled and teachers permitted is

established by law. The budget commissions, through their control of finances, may govern the activities of the school by placing a limitation on the quantity of supplies that may be purchased and the salaries that may be paid. There are, of course, other ways in which legal limitations may affect the school.

The administration of these limitations reaches the teacher through several avenues, such as the local board of education, the local budget commission, the superintendent, building principals and subject supervisors. Each group places its interpretation upon the rules and the method of carrying them out. Inevitably confusion and nonconformity arise when the teacher attempts to work within these limitations and through the avenues suggested.

There also are professional types of control. The classroom teacher is affected by the education departments and the subject departments of the college in which he has been trained. So many theories of education clamor for attention that the classroom teachers, the supervisors and the administrative heads who have been trained in different institutions may have different concepts of the underlying philosophy, methods, relations of parts and materials of education.

The same groups of workers also have been influenced by subject mat-

ter specialists in many different fields. These specialists impart their philosophies to the teachers who, in turn, carry them to the schools in which they are employed. Thus, the very avenues that might be supposed to work for unity in the field of education create confusion and nonconformity.

The other factors may be as diverse as the individual's experience. His philosophy is colored by the kind of teaching he received, by the kind of teachers with whom he came in contact and by his experiences as a teacher. The ideas that he has received through newspapers, periodicals, books, the theater, lectures, pictures and friends, all serve as avenues through which he gains ideas and, at the same time, limit him. Rating agencies, such as the North Central Association of Schools and Colleges, affect the point of view of workers in the field of education and limit or direct their activities. The community as well as an individual has a personality. Anyone within a given community is affected by the ideas expressed by the parents, business men and social leaders. State departments of education affect school people in nonlegal ways as well as in legal ways through efforts to develop activities that do not have the force of law behind them. Textbook writers have a distinct influence. This may be strengthened by advertising employed by the publishers. More careful analysis would

bring various other factors to light.

The influence of these factors results in different fundamental theories under which the schools are operated. Different theories result in different objectives. Different objectives lead to differences in content and method which, in turn, result in differences in outcome. One factor may be vastly more significant for one individual than it is for another, or it may be more significant for one group, as the administrative group, than it is for another. A tangled web of philosophies, objectives, content, method and outcomes must follow.

Before sound work can be done in the fields of curriculum construction and time allotment, the underlying philosophies of education and the acceptance of certain basic concepts must be carefully considered. The entire group must become thoroughly cognizant of these basic concepts and there must be a sufficient degree of acceptance to serve as a foundation on which to build. Out of this will come a statement of major and minor objectives. With established objectives suitable content and methods can be selected. In the selection of content there must be consideration of time allotments.

A criticism of the work being undertaken is that there is no unity of philosophy within the group at a single school. Lasting work in the field of curriculum revision and time allotment cannot be accomplished until a unity of philosophy is established through discussion and study. This must be a democratic undertaking.

Definite training in opposite directions as part of the educational training of teachers, supervisors and administrative members of the faculty will be an obstacle. A lack of training in some cases will deter advance. A misunderstanding of the superintendent's policies obstructs progress. There may be a definite feeling that the superintendent is not sufficiently familiar with some of the more pressing of the classroom teachers' problems. The necessity of using state adopted tests which are not adapted to the level of the pupils having to use them will prevent the attaining of the goals determined upon as desirable. The lack of a central clearing house of information

for a state, county or city system is a serious handicap.

The foregoing are some of the more easily determined factors. There are also some which are intangible but influential.

The philosophy accepted by the administration should be definitely presented to the faculty as a whole and the principal-supervisory group should be asked to work on the problems of objectives in the light of this philosophy. With these objectives in mind, the group held responsible will then be ready to work on the problems of curriculum revision and time allotment. The problems of method can be considered as it becomes necessary to consider them in connection with the problems of time and curriculum and later as a special group of problems.

This analysis was forced upon my attention as a teacher when I was

required to participate in meetings in which the problems of time allotment and curriculum revision were being discussed. I had been required to attend summer school where the problems had been considered in the light of an educational philosophy differing from that of the superintendent under whom I was working. My suggestion would be that these problems be worked out in extension classes for which college credit is granted or for which certificates may be renewed.

Why not offer such courses in lieu of summer school attendance? By so doing greater interest and more thorough work would be obtained. Greater teacher growth ought to develop from attention to problems that confront the teacher daily rather than from a study of the problems presented at summer school, which may be far from his present needs.

Direct Attack on Superstitions

ROSALIND M. ZAPF

THE purpose of this study was to investigate superstitions as evidence of unscientific thinking, particularly in cause and effect relationships, and to determine the influence of instruction upon them.

Five sections of 9A Detroit junior high school general science, a total of 285 pupils, served as subjects. Direct instruction was provided in two ways: by demonstration and by discussion.

For the first, throughout the semester a series of unfounded beliefs, such as the misfortune following the breaking of a mirror or the value of the number seven, were tried out in the classroom by individual members and groups.

During a period of several weeks following the trial, reports were made by these pupils concerning the things that happened to them that might be considered as good or bad luck. Conclusions were then drawn concerning the truth of the given superstition.

A second series of superstitions were discussed on alternate weeks with the first, with emphasis on

scientific methods and attitudes, following a systematic outline of procedure.

It had been previously discovered by means of two check lists of superstitions that the regular general science instruction had had no effect in reducing superstitious beliefs. Following the direct instructional attack the mean number of superstitions believed by pupils was reduced from 9.2 to 4.1 on one check list and from 17.0 to 6.6 on the second.

Incidentally it was discovered that a low positive correlation ($.24 \pm .04$) existed between belief in superstitions and emotional adjustment as measured by the Woodworth Mathews personal data sheet. Following the period of instruction the adjustment of the pupils was slightly better, the correlation remaining the same.

It is concluded that a direct attack on superstitions will reduce the number of superstitious beliefs. A part of every general science course should be the development of scientific attitudes, methods of procedure and elimination of superstitions.

Taking the School Board

to Task

C. R. FOSTER

PUBLIC opinion in America places chief and final responsibility for its schools upon the boards of education rather than upon superintendents, keeping firmly to the tradition that under a democratic construction of education, final authority for the schools resides in the representatives, good or bad, elective or appointive, who make up boards of education.

This is the conclusion drawn from analysis of American press criticism of education,¹ resulting from a detailed review of editorials on education printed during a five-year period in twenty-five American newspapers.²

Almost 60 per cent of this criticism is either favorable or neutral in character. Slightly more than 41 per cent is adversely critical in tone. This is, however, a higher proportion of adverse criticism than is directed toward school administrators. In their case only 24.5 per cent of the references appear unfavorable.

The highest rate of criticism of board affairs and policies is found in the *Denver Post*. Of all the *Post's* editorial references to school boards, 89.4 per cent are adversely critical. This newspaper was found to have the most aggressive and persistent editorial hostility to school boards and their works of the twenty-five papers examined. Chicago newspapers also rank high in school board criticism. The leading commentator on boards of education appears to be the *Cleveland Plain Dealer*, whose references to school board activities total 74 during the period.

Perhaps the happiest place for board members among the cities covered in this study is Emporia, Kan. There William Allen White's *Gazette* referred to the board of education only ten times altogether, usually with something good to say. Des Moines would rank high as a carefree environment for board members according to this criterion. In that city only 1.2 per cent of the

Register's comments on education concerned boards of education and half of these were favorable.

In New York City, although there are many references to education, the *New York Daily News*, that champion of economy, seldom came to outright criticism of the board during the whole five-year period.

A particular cause of adverse editorial criticism is extravagance and spending. In Chicago, many editorials criticized the board of education on this score. The Chicago situation is worth noting as an example of exceedingly bad relationship between educational authorities, the public and the press.

When the *Chicago Tribune* commented as follows, it illustrated this point: "The budget deliberations of the school board were shocking in their irresponsibility. The procedure, in short, was exactly what might have been expected from a school board dominated, as this one is, by the city hall gang."

The *Chicago Herald and Examiner*, on one occasion, noted that an explanation had been made by the board of education to the effect that a certain item of \$700,000 had been overlooked. "If the income of the board is so enormous that a debt of \$700,000 can be 'overlooked' as an item of minor importance, there would seem to be no special need to worry."

In turning to similar criticism in other cities, it was found that the *Cleveland Plain Dealer* was chiding the board for a "session . . . suggesting a wrestling bout rather than a meeting of a deliberative body" and asking the board to note that ". . . the 29 bureaus which blossomed in the free-spending days of 1929 are still intact, although the school

Editorial criticisms of the American schools fall upon the boards of education rather than upon administrators, this survey, made by an assistant professor of education at Rutgers University, reveals

system faces a deficit of \$2,500,000."

The *Philadelphia Inquirer* accused the city school board of being inconsiderate of the public's interests and indifferent to expense. In two other cities the school board was vigorously charged for extravagance and disregard for the public will with reference to taxing and spending.

One excerpt from the *Denver Post* will indicate how extreme the hostility of that newspaper to all phases of educational finance becomes at times. The board had voted to increase the tax levy immediately after a bond refunding measure had been defeated. Said the *Post*: "Has the Denver school board gone crazy? . . . The arrogance of the school board and its contempt for the will of the taxpayers are beyond understanding."

In Atlanta, the *Constitution* attacked the school board for failure to live within its budget, as follows: "The members of the present board should wake up to the fact that if it is not capable, or willing, to take such steps as will guarantee the operation of the department within its receipts, they should give up their places and let another board try its hands at the job of making both ends meet."

In contrast to these instances of school board criticism, based on alleged extravagance and disregard for the wishes of taxpayers, there are instances in which editors have commended school board members for conscientious and loyal work in the public interest. Under the caption "A Good Record," the *Memphis*

¹Foster, C. R.: *Editorial Treatment of Education in the American Press*, Harvard University Press, April, 1938.

²The period covered was from Jan. 1, 1930, to Jan. 1, 1935.

Commercial Appeal congratulated the school board on maintaining the schools within the budget. The *Emporia Gazette* complimented its local board's faithful efforts for economy; the *Des Moines Register and Tribune* praised the board of education for proceeding to make cuts and adjustments as directed by law, and in Kansas City, the *Star* commended the board of education of Kansas City, Kan., for its action in reducing the budget by half a million dollars.

Many other instances could be cited to show that editors are particularly pleased when local boards of education succeed in reducing the cost of the educational program.

Seek "Stand In" With Schoolmen

There is some feeling that boards of education consider their "stand in" with teachers and administrators before their responsibility to the public. This is strongly emphasized in the *Denver Post*, which says that the board is much concerned about "protecting its own tax-spenders and tax-eaters. . . . But it isn't so alert in protecting the children entrusted to its care."

In attacking the salaries paid to administrators, the *Post* compared the superintendent's salary in Denver with the salary of the justice of the supreme court of Colorado:

"Do you think any superintendent of schools is worth twice as much to the taxpayers of Denver as a justice of the supreme court is worth to the state of Colorado? . . . If one superintendent, especially one who is considered good enough to draw \$10,000 a year, can't do all the supervising the Denver schools need without an army of snoopers and wasters to help him, then the school board ought to get rid of him."

This accusation that boards of education favor the educational group has appeared also in the *Cleveland Plain Dealer* and the *New York Daily News*.

There is seldom criticism of boards of education as representing any special group of the population, but in the *Milwaukee Leader* (Socialist) it has been suggested that the board of education is favorable to employing groups and unfavorable to labor.

It has been gratifying to find an emphatic stand taken by the press

against political domination of boards of education. Although newspapers frequently campaign for or against certain candidates for board positions, they usually state that they oppose any political activity on the part of board members.

Many of them were proud of the relative absence of political control in their own communities, others warned against it or feared that it might come. This outspoken aversion to political influence in the school boards is significant and amply illustrated in the constant aggression of the *Pittsburgh Press* to prevent political manipulation with the school board.

Pittsburgh is supported in this warm fight to keep political control out of the schools by Philadelphia, operating under similar provision for appointive boards of education. The *Inquirer* has warned against any state move to make the board of education elective and has approved the activities of citizens who were fighting such a maneuver.

Fight Against Political Control

The *Cleveland Plain Dealer* and the *Chicago Tribune* joined with the *San Francisco Chronicle* in combating political manipulation of school boards. Emphatic opposition to political influencing has appeared frequently in the *Chicago Tribune*.

Pointing out that there "are plenty of 'awful examples' of large school boards around Boston where most of the time is spent in needless wrangling," the *Boston Post* feared that an attempt to enlarge the school committee would simply improve its availability as an arena for "endless wranglings and absorption in petty politics." The *Post* observed that the Boston school committee seemed to have become a place for young and budding politicians who want to use it as a political spring board.

In Baltimore the *Sun* warned against any scheme to provide sectional representation on the board. The *Sun* wanted the "right" people regardless of where they resided in the city and urged the mayor to observe caution in his appointments.

Curiously, the *New York Times* seems to be seriously considering the possibility of providing a larger and more representative board of educa-

tion. The *Times* pointed out that in New York the board is appointed by the mayor, but that in most cities it is elective. The *Times* wondered if a special school election "would not be justified by the added public interest it would arouse in the schools." Evidently the *Times* was not alarmed by any specter of politics.

Unique among the newspapers studied in its reference to political activity is the *Milwaukee Leader*. This Socialist daily frankly stated that it is impossible not to be in politics and that we might as well acknowledge the fact. Everyone, in a sense, said the *Leader*, is partisan. Candidates, it declared, must either be "for or against allowing the schools to be used as recruiting grounds for militarism, whether they make any public statement on the subject or not. And they must be either in favor of having the pupils given the slant that success in life consists in making money, or not in favor of it, whether they say so or not. . . . If they have definite views on school matters, they are partisan."

"The Socialist candidates," added the *Leader*, "make their views known. It is the only proper way to run for office. It is the only way that deserves the confidence of the people."

Seek Superior Board Personnel

Closely linked with the editorial view that politics and board membership are ill-fitted running mates, was the insistence of many editors that superior men and women should be selected for boards of education. This may be taken as an extremely gratifying indication of the fundamental belief of Americans that education should be entrusted to people of integrity and character. There was naturally some evidence that what editors mean by personnel of a high type is a reflection of their own tastes and standards. But interpreting the matter broadly there is evidence that in general editors appreciate the responsibility vested in boards of education and realize that selfish men and women, or men and women who are unintelligent, are not to be considered competent for the duties involved. It occurs to one as he reads these comments that

there is absence of specific reference to the particular qualifications needed for competent board membership. Editors seem content with generalizations.

In enough instances to justify attention a definitely adverse reaction was noted to instances in which school board procedures bear any indication of aloofness to the public will. There is a suggestion here that "star chamber sessions" rapidly antagonize public opinion. School boards, the editors believed, are public agencies, and as such their business should be open and above board. It is public business.

An unusually clear presentation of the editorial view that secrecy is undesirable at board meetings is the following editorial from the *Cleveland Plain Dealer*:

"Our suggestion . . . is that the presence of reporters at sessions which discuss important public issues is a safeguard which no governmental body can afford to ignore.

"We think that even so delicate a matter as the suggested cut in salaries to meet the financial crisis in the schools could have been safely, and much more fittingly, considered in public session. After all, this is public business, considered by public servants, spending public money. The public should not have its information limited to what someone in official position deems proper for it to know.

"There is too much consideration and settlement of public issues in executive meeting. The real business having been decided in private, the public session becomes a mere routine approval of matters already determined. This does not promote the efficiency of popular government or invite public confidence in it.

"We recognize the fact, of course, that the discussion of some kinds of problems is better confined to executive session, such as, for instance, the question of individual personnel, matters of discipline, or, perhaps, salary cuts in individual cases. General policies, however, are better considered in the open. There should be nothing to conceal.

"One of the best assurances against unwise or oppressive policies is to have 'reporters present' when public policies are discussed."

The *New York Evening Journal*, in referring to secrecy in board meetings, has said "The interest and attention of the public are the best stimulants for good public officials and the best safeguards against bad ones. . . . Let's have as little privacy and secrecy as possible, particularly about the schools."

Editors seldom discussed matters having to do with educational administrative theory, the relationship that should exist between the board of education and the superintendent

THESE 25 PAPERS WERE STUDIED

Atlanta Constitution
Baltimore Sun
Birmingham News
Boston Post
Charleston News and Courier
Chicago Herald and Examiner
Chicago Tribune
Christian Science Monitor
Cleveland Plain Dealer
Dallas News
Denver Post
Des Moines Register
Emporia Gazette
Kansas City Star
Los Angeles Times
Memphis Commercial Appeal
Milwaukee Leader
New Orleans Times Picayune
New York Daily News
New York Evening Journal
New York Times
Philadelphia Inquirer
Pittsburgh Press
Portland Oregonian
San Francisco Chronicle

and the proper relationship of the public authority and the executive.

The *Cleveland Plain Dealer*, which usually displays familiarity with educational principles and practices, criticized the superintendent in one instance for a specific act (dismissal of a staff member), but asserted that the board of education acted properly in upholding the paid executive.

The *Boston Post* recognized that the conduct of an educational system is complex and suggested that a school committee can scarcely "do much more than act upon the rec-

ommendations of the school superintendent and his assistants."

Criticism of the board of education in New York appeared in the *New York Times*, when the board failed to comply with recommendations that nominations for administrative posts should come from the superintendent. The *Times* urged that more authority be delegated to the superintendent of schools, "the board reserving to itself the consideration and approval of all major issues of policy and reviewing or checking the work of administrative officers."

The *Kansas City Star* and the *Baltimore Sun* saw eye to eye in the matter of a school board's proper function. The *Sun* held that the board is responsible for "broad policies of public education" and the management of the school plant.

Finally, individual criticisms of school boards for errors of judgment were numerous. While these were not of the type which yield the basis for generalizations of importance, they serve to show that constant alertness to public opinion is a quality no board of education can afford to discount.

Sectional differences appeared, indicating that in some cities conditions of work and cooperation for educational progress were favorable and, in others, there was harsh criticism of school boards for alleged extravagance and disregard of the public economy.

Little attention is paid to various administrative theories. There are not many references to the respective functions of board members and administrators. Silence on this topic suggests a need for editors to become more familiar with the relationship itself, and to inform the public more adequately of what is desirable in this direction if more efficient and intelligent management of the schools is to result.

A considerable volume of criticism is directed toward what editors consider to be incompetency in handling particular issues or problems. These criticisms indicate the need of constant alertness in the performance of an important public function and suggest the type of behavior expected of boards of education by the public which they represent.



From "All the Children,"
New York public schools.

Teacher and Town

Three Questions of Ethics

MARTHA P. McMILLIN

TO WHAT extent should the school board restrict the activities of teachers, when such activities bring them into direct competition with merchants and owners of other private enterprises within the community?

In some districts where this question has recently arisen, dissension and bitterness have been evoked because there was no established rule for dealing with the situation.

Q.—Should the athletic director, music teacher or any other instructor be permitted to sell supplies and equipment to the pupils, thus depriving the merchants of the patronage to which they are rightfully entitled?

A.—No.

No public school employe should be allowed to act as agent for any author, publisher, bookseller or any other person; to introduce any apparatus, furniture or any article whatever, or to receive any gift or reward for so introducing or recommending these articles. Even though the teacher makes no profit whatever in such a transaction, he should not be permitted to purchase any supplies, including musical instruments, and retail them to pupils in the school.

The reasons for such a ruling are obvious. The merchants who support the schools with their taxes should be protected from competition within the school system. Any violation of this rule by teachers and administrators will bring the entire educational system into disrepute.

Q.—Should teachers and administrators act as agents for publishers and manufacturers endeavoring to place their books and materials in the public schools?

A.—No.

No teacher or administrator should be permitted to act as an "inside agent" under any circumstances. Neither should he be permitted to accept a gift or loan of a course of study, with the understanding that he will report his opinion of the course to someone in authority, such as the principal or head of the department. In other words, every teacher and school officer should be prohibited from assisting directly or indirectly, whether for gain or not, any publisher or manufacturer in placing his materials in the public schools.

However, a public school teacher who has prepared a textbook or other material should be permitted to negotiate for its adoption by public school authorities.

Q.—Should public school music teachers be permitted to give private music lessons either within or after school hours, thus competing with local private music teachers?

A.—No, if private lessons are given during school hours on school

time. During regular school hours, every teacher should be required to give full time to his public school duties.

Permission to give private lessons outside of school hours must depend upon local circumstances, and whether or not there are private music teachers competent to handle the instruction in various instruments. Theoretically, the outside activities of a public school teacher in after-school hours are his own business, so long as such activities are lawful and do not interfere with his duties and responsibilities as a public school teacher.

It is seldom good policy for teachers to give instruction to public school pupils after school hours, for compensation. This policy always arouses the indignation of private music teachers who are dependent upon their profession for a livelihood and, consequently, ill-will develops between the two groups.

If there are no private music teachers in the community competent to instruct in certain instruments, then it would be permissible for the public school teacher to give instruction in these particular instruments. As a general rule, however, it is highly advisable that the public school teacher refrain entirely from giving private lessons for compensation.

Q.—Should the public school be used by a teacher engaged in giving private instruction?

A.—No.

Under no circumstances should the public school teacher use the school building in giving private lessons for private gain. In many states, this provision already has been incorporated into school law. The reasons are so obvious that they need no explanation in this article.

A laissez faire attitude on the part of a local board of education in restricting the business activities of teachers may bring dire results; a permanent policy may divert personal animosities if a troublesome situation should arise

To Stabilize State School Support

F. G. CORNELL

PERHAPS no greater need has come to light as a result of the economic depression than the need for stability in state school finance programs. There are a number of ways in which stability in the support of public education may be relatively secured in the several states. Studies in the areas of federal responsibility that have appeared since the depression indicate that a stable and adequate source of revenue to support a decent minimum of educational opportunity may not be obtained without some degree of general aid.

Innumerable studies by school finance specialists and by taxation experts have pointed the way to stabilizing the support of public education through broadening the tax base. Many fiscal adjustments will have to be made by the state and its local units before this can be achieved. The stabilizing effect of eliminating small, inefficient school districts is apparent.

Barring extreme centralization of support and control in the state and the elimination of local autonomy in education, the ultimate plan, if it is to be stable, will likely involve the state grant-in-aid. With particular reference to the share of revenue from the newer state taxes to be received by education, the question may resolve itself into one of how to prevent other governmental services from encroaching upon that portion of the state's resources that is to be devoted to public education. This is primarily a matter of alimention of state funds.

Some educators have advocated the dedication of specific tax revenues for state school support. They believe that in this way stability is maintained and hence freedom from the usurpation of funds upon which education has a prior claim. If the legislature specifically sets aside a tax for the exclusive use of the educational program, then some security has been achieved.

However, there are certain disadvantages to this method. In the first place, stability may be achieved only

to the extent that the special tax itself is stable. This is of particular concern in case, during periods of economic depression, the yields of the tax decrease. Furthermore, extravagance may be encouraged should the yield of the dedicated tax prove to be more than is actually needed. In other words, this plan primarily adjusts expenditure to a mechanism of finance rather than to the more fundamental factor of educational needs.

A recent plan for the alimention of school funds that may introduce a high degree of stability in the state support program is called the "overflowing pot" plan.¹ It provides for the dedication of the first returns of a tax yielding more than that necessary to provide state support funds. The remainder, after the state program has been financed, goes to the general revenue funds of the state. It has been proposed that, especially when a state has adopted a plan of distribution based on satisfactory and objective measures of need, the general policy may be preferred.² On this basis the state would commit itself to the support of a minimum program of education as determined by a fair and equitable measure of educational need, with some allowance for the relative abilities of school districts to support their own programs. The acceptability of either

plan will depend upon whether or not the amount of state support is made to fit the public school finance program and not vice versa. This is especially true if the state support plan is to be worked out on some objective predetermined basis that will allow certainty in both state and local fiscal planning. Thus would be classed most plans of equalization involving both a measure of educational need and a measure of ability.

If the state has an equalization program, the amount of state aid to any single administrative unit is equal to the unit cost of the program (\$60 per pupil or \$1500 per weighted elementary classroom, for example) times the number of units in a district, less the assessed valuation of the district, times a theoretical tax rate. In brief, this may be written:

State aid to district = (unit cost \times number of units in district) - (valuation of district \times fixed rate).

The total amount of aid to be paid by the state on a strict small-fund distribution would be the unit cost of the foundation program times the total number of units in the state, less the total state yield of the theoretical tax rate on property. In other words, the total state aid would be the aggregate cost of the foundation program less the state and local contribution. This may be written:

Total state aid = (unit cost \times units in state) - (state total valuation \times fixed rate).

In this form, without legislative changes over a short period of time, the unit cost of the program and the fixed rate of local contribution would remain the same unless the particular pattern of equalization were to be changed. The application of this formula for small-fund equalization in its simplest form is illustrated in chart 1. However, the two other factors, the number of units in the state and the total valuation of property in the state, may change abruptly as the result of emergency conditions. What the depression and unemployment did in the way of increasing enrollment in schools, and especially in high schools, where the unit cost

¹Mort, Paul R.: State Support for Public Education. National Survey of School Finance. Washington, D. C.: American Council on Education, 1935, p. 221.

²Pearman, W. I.: Support of State Educational Programs by Dedication of Specific Revenues and by General Revenue Appropriations. New York: Bureau of Publications, Teachers College, Columbia University, 1933.

is greater, is well known. By the foregoing formula in cases of increase in attendance (and hence increase in the number of units and total cost of the state program) the state shares in providing funds for the support of the added load. The local contribution changes only with changes in valuation.

Suppose property valuations dropped, as they actually did in most states during the depression, then the yield of the fixed rate produced a smaller local contribution. The difference was made up through state aid. This is graphically illustrated in chart 2.

It is to be noted, however, that assessed valuations have a tendency not to be sensitive to fluctuations in true values. The aggregate full valuation of property in New York State, for example, was 33.9 billion dollars, 34.8 billion dollars and 35.1 billion dollars for the years 1930, 1931 and 1932, respectively; whereas it is known that actually, if any change at all, there was a tremendous decrease in valuation of property.

Now let us suppose that some other situation were to be faced — inflation, for example. Property values would rise, and for a given number of pupils to be educated the contribution of localities to the program would be increased, provided, of course, the machinery for the assessment of property was sensitive enough to reflect the effects of inflation upon true changes in property valuation. The fiscal capacities of the local units might have varied among themselves, but collectively the balance of burden between the state and its local units probably had not changed. Yet the equalization pattern will be thrown out of balance, as illustrated in chart 3.

Here we are discussing the hypothetical situation of inflation and increasing prices, other things being equal. In the distribution formula given above, the unit cost (dollars per weighted pupil) is fixed in the state-aid law on the basis of costs determined during a pre-inflation period.

In its simplest form the equalization pattern may be altered either by changing the unit cost of the state program or by changing the rate of local contribution. Either reducing

the unit cost of the foundation program or increasing the rate of local contribution will effect an increase in the share of support to be met by local communities as a whole. Increasing the unit cost or decreasing the local rate brings about greater state participation in the support of the total program. But in case of inflation the real value of the cost of the foundation program becomes less. If property values take an upturn, the old rate forces localities to contribute more to a devalued foundation program.

One alternative would be to change the law and increase the cost per unit of the foundation program or to change the local rate of contribution to allow for devaluation of the dollar. But, if possible, it is desirable to introduce features in state-aid legislation that will bring about such adjustments automatically.

The following discussion will treat a formula which has been developed recently and which to my knowledge has not been used in any state-aid program, but which serves to stabilize the balance between the local contribution and the extent of state support. This formula I developed in connection with a program proposed by Paul R. Mort and others for a program of federal aid to the states.

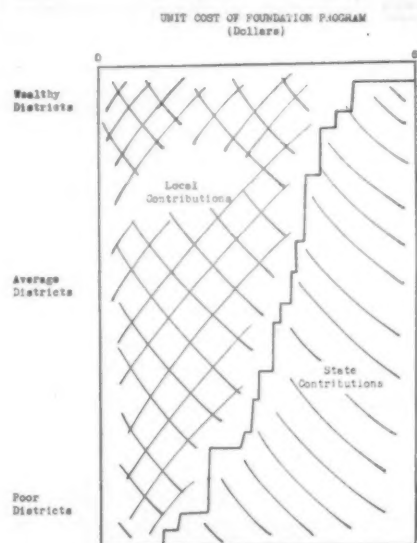


Chart 1 shows original support pattern yielding maximum equalization on small-fund plan. Basically unchanged where local contribution is determined by ability index formula. The value of \$60 may change from time to time but districts as a whole give the same proportion.

The measure of ability of states is somewhat more complex than the measure of ability of local subdivisions of the state; hence, in the federal-support plan particular attention had to be given to the matter of stability. State relative ability measures involve such factors as production, retail distribution and general business activity. It was necessary to express the relative ability of states in index form to prevent undesirable changes in the weightings of component factors through changes in their magnitudes. Geographical indexes are commonly expressed as ratios to the average. In a relative sense this is precisely the same as indexes reported in the form of percentages.

In the small-fund equalization of federal aid to states, it was found that maximum equalization would be attained when 44.75 per cent of the total cost of the foundation program for the United States would be borne through state and local contributions. For equalizing a \$60 program, the amount of state and local contribution would be .4475 times the total units of need in the United States times \$60. Each individual state would contribute that proportion of the total state and local contribution in all states represented by its percentage of the total tax ability.

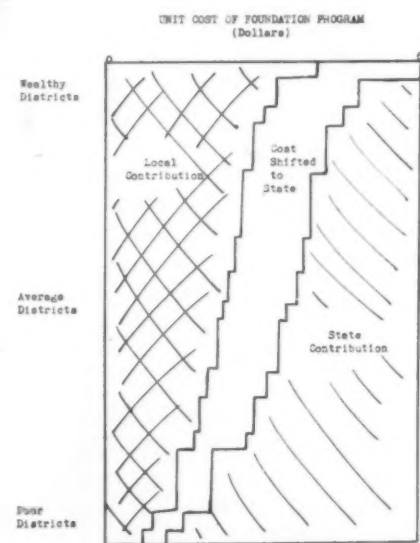


Chart 2 shows effect of deflation on formula using fixed rate of local taxation in determination of local contribution. The \$60 is worth more; state foundation program automatically increased. Property values are declining, however, and this naturally reduces the contribution.

For any single state, then, the amount of contribution = U. S. total units of need \times \$60 \times .4475 \times proportion of state and local ability.

The \$60 and the .4475 are constants. If the particular equalization pattern is to remain unchanged, both the proportion of state and local contribution and the extent of the foundation program would have to remain the same. These may be combined. That is to say, states and localities according to their relative abilities would contribute 44.75 per cent of the \$60, or \$26.85. Hence, we could write for any single state:

The amount of contribution = U. S. total units of need \times \$26.85 \times proportion of state and local ability.

As may be seen from this relationship, the only change in either the total amount to be contributed by state and local governments or the amount to be granted in aid by the federal government will result from changes in the number of units of educational need, and this change is made in such a way that the balance of support between the states and the federal government will remain fixed until, through legislative act, the provisions are altered. Except for minor changes in the broken line separating local from central support because of shifts in the distribution of ability

and need, the general pattern of support illustrated in chart 1 (but applied to federal aid) would not be altered under conditions slated for charts 2 and 3.

Applying the foregoing to the state support program is possible either through the use of property valuation data direct or through the application of technics recently developed for objective indexes of relative ability.³ These indexes may be expressed as percentages of the total local taxpaying ability in the state. In this way the amount of local con-

³Cornell, F. G.: *A Measure of Taxpaying Ability of Local School Administrative Units*. New York: Teachers College, Columbia University, 1936.

tribution is the product of a constant (the unit cost of the foundation program times the proportion of its support to be borne locally), the total number of units of need in the state and the ability index of the local unit (expressed as a percentage of the state total).

Stability is here attained by preserving the proportion of the total cost to be borne by the state and by the local units. Shifts in the aggregate amounts will arise only from changes in the need, as it should be. As for individual districts, their local contributions will change only as their relative ability changes, that is, their ability compared with the ability of the state as a whole.

House Planning Course Pleases

EINAR J. ANDERSON

IN A new course introduced into the Maine Township High School at Des Plaines, Ill., designed to develop an appreciation of good architecture, girls are taught to make, read and understand ordinary blueprints, draw houses to scale, make landscape layouts, and recognize the principles of good interior decoration and furniture styles.

The course has not been introduced to give vocational training. Modern girls and boys need a wide range of subjects from which they may discover their interests and aptitudes. With a reported shortage of some 480,000 house units in the United States today and so much discussion about building and owning one's own home, there is certain to be a continued, if not greater, interest in houses for some time to come. The house planning course has been arranged to be as practical as possible.

One hundred girls now studying house planning draw plans of their ideal kitchens, dining rooms, living rooms, bedrooms and bathrooms, study prevailing architectural styles and draw perspective sketches of "houses of their choice."

Such statements as: "I didn't know there was so much to learn about planning a house," or "I think I should like to become an interior dec-

orator" or "Will I be able to take more than one year of house planning?" made by some of the girls interviewed are indicative of the response the course is receiving. Only the present classroom facilities prevent the enrollment from going well above the 100 mark.

An interesting unit now being carried out is the rearrangement of a room. Each girl receives a blueprint of a room with doors, windows and furniture all out of place, and it is her problem to rearrange the room so that it will be well balanced. This unit will be followed with a floor plan in which the walls may be folded up, so that the pupil may see how the room would appear in a house.

This is the second new course introduced during the current school year by the industrial arts department. The other is a general industries course open to freshman boys. In this five-unit rotating course, which aims to give a bird's-eye view of the industrial shops at the high school, the boys spend eight weeks in each of the following shops: printing, wood, metal, art and mechanical drawing. A similar rotating course for freshman girls is being formulated. This will send the girls through five shops during the year.

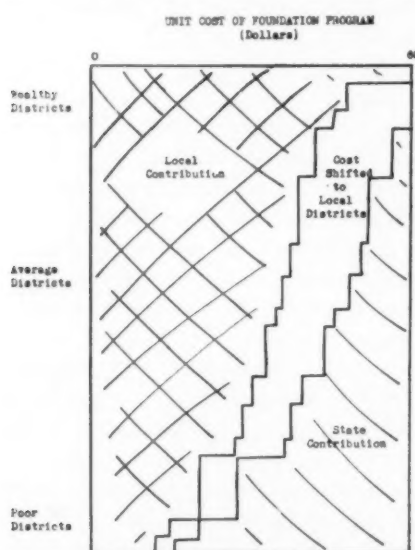


Chart 3 gives effect of inflation on formula using fixed rate of local taxation in determination of local contribution. The \$60 buys less; state foundation program is automatically decreased. Property values are rising under inflation and the local contribution is thus increased.

Whose Friends?

Government by telegraph is what we get from Washington, charges this Minnesota school superintendent. An avalanche of telegraphic protests against this bill and that pours in from minority groups. Is this democracy? The author asks schoolmen to rid our government from lobbyist rule and minority tyranny

W. B. McPHERSON

EVEN as the giant Gulliver was overcome and humbled by the swarms of tiny Lilliputians, our American government is being slowly but nonetheless surely destroyed by small men and tiny groups. Our famed "government of the people, by the people and for the people" is going the way of the dodo and the passenger pigeon. In its place we are developing a government of the taxpayer, by the organized minorities, for the grabbers. Never since the days of Imperial Rome has any government been threatened to so marked a degree by those who mutter in a sinister undertone, "Give us our pet graft, or else . . ."

By way of example let us recall events of the first session of the 74th Congress. Two bills were being considered. Both would reach the same end but by different means. Either would add two billion dollars to the national debt.

In the gallery of the House of Representatives sat two men. One represented an organization made up of less than three-fourths of 1 per cent of the American people. The other represented an organization much smaller. One of the organizations favored one of the proposed bills, the other organization favored the other bill. As the vote on these measures progressed these two men openly listed those who voted against their legislative "babies." Their very presence and acts said to the members of Congress, "Vote the way my organ-

ized minority demands or we will assist you to your political funeral."

Sorry indeed is the state of American democracy when the representatives of the American people are thus openly and flagrantly threatened by the representatives of the few. In the second session of the same Congress these two organizations united in support of a compromise bill. A news weekly describes the scene: "When the vote came, lobbyists took prominent seats in the galleries, then ominously checked off names as the clerk droned the roll call."

We should not think that the American Legion in its support of the Vinson Bill or the Veterans of Foreign Wars supporting the Patman Bill are the only organizations that act in this manner. Their conduct is the more noticeable because they are patriotic organizations. Both are, nevertheless, joining in the destruction of our American democracy by minority pressure. One more instance can be mentioned—the so-called McCarran Amendment to a certain relief appropriation bill. Few of us can remember the incident, let alone the provisions of the amendment. Suffice to remember that the American Federation of Labor, about 2 per cent of the American people, did not like it. This word went out to the local unions. Blindly obedient, they flooded Washington with telegrams and letters. Telegraph companies prosper and representative government is destroyed! We have

telegraphic referendums on all matters important and unimportant.

Please do not misunderstand me. I hold no brief either for or against the Vinson Bill, the Patman Bill or the McCarran Amendment. What I do want to state emphatically is that, if our American government is to continue being a representative democracy, we must stop organized minorities from determining the course of the ship of state. Can we imagine a captain who set the course of his ship for one hour in the direction in which the cook wished to go, the next hour headed the way the cabin boy thought was home and the next hour steered in the direction toward which the ship's mascot pointed his nose?

The fundamental theory behind the establishment of a representative democracy is that the people should select men of intelligence, ability and character to act as their agents in carrying on the business of government. Why select men of intelligence if lobbyists do their thinking for them? What man of ability would be willing blindly to follow the orders of this or that minority organization? How can a man of character long retain his character or office in the midst of lobbyists and the pawns of lobbyists? Today our representative democracy is fast becoming a minority group oligarchy.

At the beginning of the present century a political revolution arose out of the discovery that there were in our national capital "sugar trust senators," "packing plant senators," "lumber senators" and "railroad congressmen." Great business interests had bought and paid for high government officials. Today is the situation any better? We have "labor senators," "veterans' representatives," "cotton senators" and, we might be led to suspect, "relief senators." But we do not have, and can never hope to have under our present condition of representative decadence, people's senators or American representatives. We have destroyed our government as a representative democracy and have created a minority pressure oligarchy. A democracy cannot survive when the meetings of the legislative body are turned into a track meet at which the citizens race for first place at the public trough.

Recently there came to my desk a letter saying, "House Resolution No. — threatens the security of education. Write your senator and your representative. Get all your friends to write to them protesting against the passage of this bill."

Shall I do this? Did I send those men to the state capital to think for me or to obey my whims? Perhaps I should have said the whims of some lobbyists. Did I select a man with intelligence and character to do my thinking for me on governmental matters or did I select a glorified office boy to act as a receiver and obeyer of letters and telegrams?

"Well," says my friend and neighbor, "every other business minority group is sending letters and telegrams so educators must do the same or education will not get its share."

How sadly this statement shows the two major dangers of this new government! If any worth-while activity happens to be without its representation in the mad scramble of the lobbyists it is lost, for then it will receive nothing. The second major fallacy of our government by telegram is that every minority has its "share" in the public treasury which it must seize and hold fast.

Two courses are now open to the American democracy. We can continue on the road down which we are now traveling and can complete the establishment of a tyrannical oligarchy of minorities. Our government will then be controlled by the Daughters of the American Revolution, the American Manufacturers' Association, the National Education Association, et cetera, *ad nauseam*. We might continue to elect senators and representatives but that would be needless expense since telegraph companies and magazines could be delegated to count the telegrams and the straw votes. Or we could allow each lobbyist to levy his own taxes without any troublesome congressional interference and to write out checks on the federal treasury.

On the other hand, we can return our government to its original principles. We can reestablish in the minds of our people the fact that a democracy can survive only as long as people think and act for the public good rather than for private and group gain. We can elect men with

brains and bravery and then let them use their brains in running the government. They will find need enough for their bravery until the lobbyists and telegram senders die off.

Now, what shall I do about this letter from the professional association of which I am a member? Shall I promptly and vigorously denounce House Resolution No. — in a letter to my representative? It is a certainty that no honorable profession should be compelled to join in the mad scramble for government largess. Today we need leadership in a movement against the practices of those minorities that would destroy our government. Where but in the organized professional groups can we hope to find it? May the time come in the very near future when some organized group will say to our legislative bodies, "Give us a high-minded and intelligent government, ordered for the good of the state and the people of the state as a whole, not

for the good of our association alone."

May the time come when the leaders of government are the "friends" of nobody, but have the intelligence and character and the bravery to use their intelligence for the good of the nation. Then our government of the taxpayer, by the minorities, for the grabbers will perish and the "government of the people, by the people and for the people" will be restored.

To every minority and especially to the organizations of business and professional men comes this challenge—you claim to represent men with ideals, you claim to represent men who should have intelligence and business sense enough to see the inevitable result of this wild rush for the dole. Will you as an organization made up of such men have the true patriotism, the courage and the consideration for the public welfare needed to say, "Our organization will not take part in any move to enrich ourselves at public expense"?

Tomorrow's Tools

HALFORD E. LUCCOCK

THE central idea around which the World's Fair in New York City in 1939 is being organized, "Tools for Tomorrow's World," gives an imaginative picture of the task of education in a changing world.

Education must develop different types of tools for the shaping of any future world that will be worth building or living in. Its task is human engineering, to create the directing minds so that the mechanized achievements of tomorrow will be a blessing and not a means of collective suicide.

One such indispensable tool is the individual personality who can say "I" as well as the collective word "we." It is the development of individual minds that have color and the integrity to stand against social pressures and taboos. This task calls for more than an educational assembly line where standardized parts are put together.

Another tool for tomorrow's world must be freedom of speech and

thought. Where freedom of thought and speech has perished, as in Italy and Germany, schools and universities have become corpses or empty mausoleums. Certainly not for a generation has education been challenged as it is today in its function of bringing mind and thought to bear on problems of today.

A third tool for a secure and enduring world of tomorrow is democracy. The surest way to lose it is to take it for granted and to underestimate the price that must be paid for its continuance. The only way to save democracy is to make it work for widespread human welfare.

Another tool is the data and fact brought through education to the people, which will enable us to bring our social thinking into line with the realities of the material framework of our civilization. The whole process of education must present the actual facts about our world so that social thinking and action may be geared to the present realities of our life and fitted to direct them.



Camps of Today

HERBERT H. TWINING

Learning to sail a boat is an art that can be mastered as these boys are doing, under the direction of a skilled instructor. Archery provides wholesome recreation throughout the year.

VARIOUS estimates indicate that there are between 10,000 and 15,000 organized camps in this country today. These are run by numerous organizations and agencies and by private camp organizations, usually owned and operated by individual camp directors or by a small group of individuals.

One of the chief reasons for the rapid increase in the number of camps in the last twenty years has been the steady increase in urban population. Cities grew rapidly and crowded conditions were inevitable. With this new city life and its artificialities interest awakened in the possibilities of a more informal educative process. The advantages of camp life were recognized in offsetting the regimentation and overstimulation of the city environment.

As the camps increased in number, they naturally varied greatly in their objective programs. The educational concepts and philosophies of groups sponsoring the camps are reflected in the personnel and programs of the camps. As the earlier camps reflected the strong personalities of individual directors, the programs of the present day camps reflect the philosophy of the sponsoring organizations. However, many private camps still reflect the personalities of their directors. Because of the variety of group



Emphasis is placed on developing skills in outdoor living, such as pitching a tent or studying nature at first hand. On the opposite page boys participate in other activities of a full day's program.



work and character building interests that characterize the organizations sponsoring camping, it is logical that many of our camps today have become highly specialized.

The camps sponsored by organizations such as the Boy Scouts, church groups and boys' clubs, follow to some extent the activities which the organization furthers. This makes a tie-up between the summer experience and the year-round city program.

Specialized camps have their place in the whole program of camping, but a camp can be too highly specialized and allow many of the real needs of the individual to go unnoticed. Obviously some of these camps have recognized this difficulty and have broadened their program to meet the individual needs of the campers.

Camping today is cutting across all lines of society and bringing the opportunities of camp life to children of the tenement districts as well as those of the more privileged groups. Such camps as the Life Camps, sponsored by *Life* magazine, and the Fresh Air Camp, sponsored by the Student Religious Association of the University of Michigan, take children from the poorer sections of cities and give them opportunities to live outdoors, perhaps for the first experience of that kind they have ever had. It has been impossible for them to take children for more than a week or ten days each summer. Budgets are limited, and most people have felt that it was better to give a large number of children a short period of camp rather than a small number a longer camping period. This has

been done despite the well-established fact that it is difficult to change attitudes or habits of children in a period as short as a week or ten days. It is extremely difficult to make noticeable changes even in an eight-week camp.

In most of these camps the entire expense of the camping experience is borne by the sponsoring agency. In a few instances a minor share of the expenses is carried by the parents in order that they may feel a responsibility in their relationship to the camp.

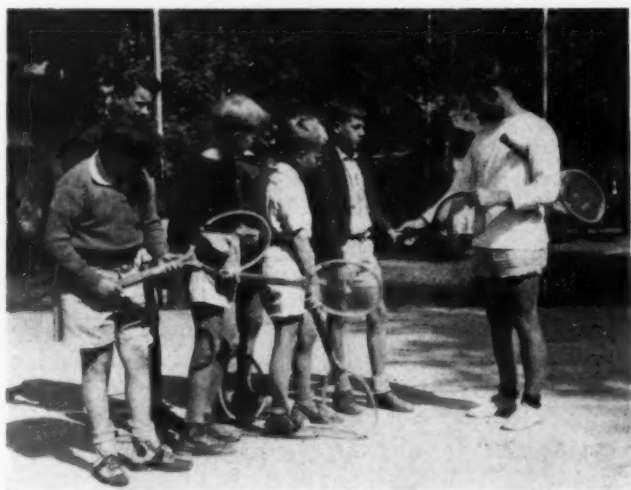
In camps sponsored by the Y.M.C.A., Y.W.C.A., Girl Scouts, Boy Scouts and Camp Fire Girls, parents pay for the minimum operating costs and the organization supplies the capital investment and sometimes a share in the program and personnel budget. Certain organizations also have developed camps that from the standpoint of cost may be placed between the organized semipublic camp and the private camp. In these camps a long-term program has been developed and the campers remain for a number of weeks.

Camping had its beginning in an organized way in a private camp. Directors of private camps have been outstanding in their leadership in the camping movement. They have shared their experiences with public and semipublic camps. The camping movement today is indebted to many of the pioneer private camp directors who have been so genuine in their interest in youth.

The private camp today has a distinct opportunity and advantage in that most of the campers are enrolled

for the full camping season of six or eight weeks. This gives the director and the counselors an opportunity of providing many educationally significant situations that would be impossible in a shorter term camp. A child living in a summer camp for eight weeks spends more waking hours there during that time than he spends in a school during the entire year. This opportunity of observing and guiding boys and girls on a twenty-four-hour program for eight weeks represents an opportunity rich in experiences and results. Because of the number of fixed expenses involved in operating a good private camp one realizes that the tuitions are commensurate with the services rendered.

In the last four years the federal government has developed an extensive camping program. During the depression when many youths were crowding highways and city streets, not knowing where the next night's lodging or meal might be obtained, the government set up the Civilian Conservation Corps camps. These camps were organized under the direction of the U. S. army because it was necessary to develop them rapidly to meet the emergency. Their primary objective was to supply work to unemployed young men, but soon after their establishment, their educational significance was revealed. The work program of the camps was put into the hands of the group of trained foresters and conservationists. Under their leadership large areas of waste land have been reforested, many thousands of miles of public highways have been landscaped and many projects of wild





Rainy days are ideal for instruction in woodworking and in all types of handicraft. In almost every camp there is a carpenter shop, complete with lathes and other tools, in which the campers may learn the rudiments of craftsmanship.

life conservation have been developed.

Long evenings presented opportunities for recreational and educational programs. Educational advisers were appointed to the camps, and in cooperation with the U. S. Office of Education and many universities and colleges, courses of instruction were and still are being given to the thousands enrolled. Many have found this training the spark that has kindled their desire to go on with higher education or to learn a trade. In the last four years two million youths have passed through this camping experience offered by the hundreds of C.C.C. camps spread throughout the United States.

The National Park Service entered the field of organized camping in 1934 under the land program of the F.E.R.A. when the recreation demonstration areas were established. The land program has as its chief objective the purchase of submarginal agricultural land and its conversion. That the benefits of camping may be brought to a greater number of underprivileged children the National Park Service has developed a number of camps in these areas. There are twenty-two in operation today under the sponsorship of the Boy Scouts, settlement projects, Y.M.C.A., church groups and 4-H groups. The camp facilities are made

available for these organizations on a low-rental basis.

During the 1937 camping season 41 different agencies were granted camping permits for the use of these camps, and a total attendance of more than 100,000 camping days was recorded. The national parks also have developed camping facilities such as shelters and lodges for independent camping groups and family groups.

In the philosophies formulated by camps today, we find several factors: that children need to get away from their parents during the summer months; that parents need to have a rest from the children; that certain traits of behavior may be adjusted and worked out through a complete change of environment, and that a simple effective instruction in the fundamental laws of life may be more easily taught in the camp than in the home or in the school.

Many camp organizations today require their counselors to prepare themselves in child psychology, camping methods and problems of personnel and adjustment.

In the early camps many directors and counselors worked for the sheer love of the responsibilities that went with rugged camp life. Today camp leaders are largely concerned over the financial return that the counseling position offers. Some, of course,

are interested in the element of service and the actual contributions they can make to the lives of the children, but for most counselors their work is not a terminal job or profession, but it undoubtedly will be for increasing numbers as camping grows. In fairness to the counselors who are concerned about the financial return offered, we must recognize that economic pressure makes such considerations necessary. However, when the desire to serve takes a minor position in the minds of leaders, it is possible that the effectiveness of their counseling may decline. It is encouraging to note that many camps are more concerned in having their counselors basically interested in experiences which test their initiative and stamina than those which test the skills involved in the artificial activities of life.

Along with the changes in program emphasis and changing attitudes of personnel, the physical equipment of the camps has changed. Even many public and semipublic camps are too extravagantly outfitted. When too many conveniences of the city are transplanted to the camp, the very simplicity that camping has hoped to bring to the children in their summer living has been lost.

The opportunities for camping should not be restricted to the two months of the summer. Many new camps are being developed so that they may be used the year round. Most camps operating today cannot justify their investments in camp equipment and facilities on the basis of camper days used.

Organized camping has not been limited solely to the United States. The organized camping movement is recognized today in many countries, but camping interests vary as they do within the movement in this country. If the camping experience is as valuable in the lives of children as so many educators and parents have said, these experiences and opportunities should be supplied ultimately for all children. Many trends and projected plans are pointing in that direction. A number of people today believe that ultimately a plan will be worked out that will include camping as an essential part of the educational program of children.

Public Aid to Nonpublic Schools

M. M. CHAMBERS

IN THE early history of the United States it was not uncommon for privately controlled educational institutions to receive outright appropriations of public funds. The practice continues to this day in a few states, chiefly along the North Atlantic Coast. Maine grants public support to private academies, Pennsylvania aids certain private nonsectarian universities and similar practices continue on a limited scale in Maryland. This list is not exhaustive and it is probable that isolated examples are still to be found in a few other places.

Property Is Tax Exempt

In most states, however, public appropriations have been entirely discontinued; in some instances this is due to amendments to the state constitutions interdicting the use of public money in aid of any privately controlled institution. Strict prohibitions against the appropriation of tax funds to schools under sectarian or denominational control are found in the constitutions of many of the states. The only form of state subsidy to institutions of this type which remains in all the states is the exemption of their property from taxation. In contemplation of law this form of aid is distinct from the actual appropriation of public funds to the institutions, though in practical effect it is the equivalent of a substantial public subsidy.

Within recent years there have been many developments tending to revive the question of public support for private institutions. The cumulative effect of these developments makes the subject a live issue today. A few occurrences contributing to this result may be mentioned. The pinch of the depression was as severe upon private schools as upon public schools, and this circumstance moved many of the friends of private schools, both of the denominational and nonsectarian types, to seek

public assistance in some form. For example, when Ohio increased the state's contribution to the local public schools, an effort was made on behalf of the parochial schools in that state to secure the enactment of legislation which would provide for payment by the state of specified sums to the parents of pupils in attendance at private schools. This effort failed, at least for the time being, but may be revived in future sessions of the legislature.

In 1931 the Supreme Court of the United States decided that there was no constitutional bar to prevent a state from furnishing free textbooks and school supplies to pupils in all schools, both public and private, as is done in Louisiana. The phase of the vast relief program of the federal government, which makes possible the employment of limited numbers of pupils in high schools and colleges in order to enable them to continue in school when they would otherwise be forced to withdraw for lack of funds, makes no distinction between public and private schools. Recently in at least a half dozen states, statutes providing for the free transportation of pupils attending private or parochial schools in public school conveyances, at least under certain circumstances, have been enacted.

Interest in this matter is greatly accentuated by the fact that the President's Advisory Committee on Education, which issued its report in March of this year, recommending a

program of federal aid to the states for public education, specifically proposed that the states should be expressly authorized to use at their own discretion a part of the funds to be granted for general elementary and secondary education for the purpose of providing free textbooks and free transportation to pupils in any schools, public or nonpublic, as each state might determine. This recommendation was certainly in complete harmony with the theory that the control of education should remain in the states, and that federal financial aid should not carry with it federal dictation of state educational policies.

Recent Measures Are Different

Nevertheless, the recommendation was immediately attacked by some nationally known authorities in educational administration, who asserted that by leaving the way open for the states to use federal funds for the purposes above mentioned, the recommendation violated the historic principle of the separation of church and state, and argued vehemently against the use of public funds in any manner that might redound to the benefit of any schools under sectarian control.

The issue is not as simple as it seems. The early practice, now so largely discontinued as to be regarded as a dead issue, because generally expressly prohibited in the state constitutions, was the appropriation of public funds directly to the nonpublic educational institution, and not to the pupils or to their parents. None of the measures recently proposed are of that type. Instead, they involve the use of public money to aid the individual pupil or his parents to facilitate his obtaining an education in the school of his choice, whether it be a public or nonpublic school. This is the theory underlying the universal free textbook law in Louisiana and the recent free transportation laws in New York, New Hampshire, Massachu-

New state statutes providing for public transportation of private and parochial pupils add fuel to the old controversy over public support of privately controlled institutions

setts, Maryland and Kansas. The same principle underlies the student aid program now administered by the National Youth Administration and the recommendation of the President's committee heretofore discussed.

Even the most captious critics of the foregoing measures must admit that the use of public funds to assist a pupil in pursuing his education at the institution of his choice is a different thing from the making of direct appropriations of public funds to private institutions. Without attempting to forecast the ultimate outcome of the clash of opinions that is now going on, it is possible to observe some interesting happenings arising out of the administration of the relatively new state statutes providing for public transportation of private school pupils.

In some of the states these statutes are so restricted in their application as to minimize the likelihood of administrative difficulties. For example, the Kansas law of 1937 merely provides that private or parochial school pupils who reside along a regularly established route traveled by a public school conveyance, or who shall present themselves at a suitable point on such route shall be entitled to the same privileges as to transportation as are provided for public school pupils. Thus, the new provision apparently will not necessitate any re-routing of school buses. Furthermore, the attorney general has ruled that no school district can be compelled to provide transportation for parochial school pupils unless it is already providing conveyances for public school pupils. Nevertheless, it is easily possible that situations leading to litigation may develop under the Kansas law.

In New York State such an occurrence already has taken place, and suit to enjoin the board of education of a school district from transporting parochial school pupils at public expense has been unsuccessfully brought. The present decision is by the supreme court in Nassau County, and no doubt the issue involved will ultimately find its way to the court of appeals, which is the highest court of the state.

The decision of Justice Furman upholds the constitutionality of the

statute permitting public transportation of private school pupils, and holds that it is not in conflict with the constitutional provision which stipulates: "Neither the state nor any political subdivision thereof shall use its property or credit or any public money, or authorize or permit either to be used, directly or indirectly, in aid or maintenance, other than for examination or inspection of any school or institution of learning wholly or in part under the control or direction of any religious denomination, or in which any denominational tenet or doctrine is taught."

The reasoning of the court is not wholly convincing, though its conclusion is probably correct, as expressed in the following words: "It can readily be seen that the service afforded by this amendment to the law is distinct and independent of the school itself and is intended solely for the convenience of the pupils and to promote their education, and is not 'aid to or maintenance of' a denominational school, as such words are contemplated by Article 9,

Section 4 of the state constitution."* One can scarcely agree with the part of the opinion which declares that the test is whether the parochial school would stand to gain or lose if no means of public transportation were afforded its pupils and hastily concludes that there would be no gain or loss. Anyone familiar with the operation of private schools must believe that measures which substantially assist pupils in reaching the school or in continuing their attendance are of incidental benefit to the institution. It would seem that the better test would be whether the relatively small and indirect gain to the school ought to be disregarded as a mere inconsequential incident to the achievement of the primary purpose of the law, which is to assist the pupil in gaining access to the means of an education in an institution of his own choice which is approved by the state.

*Judd, et al. v. Board of Education of Union Free School District No. 2, Town of Hempstead, Nassau County, et al. (Bennett, Attorney General, et al., Interveners), 300 N. Y. S. 1037 (Nov. 9, 1937).

Broadcasts From Bismarck

RITA A. MURPHY

THE Bismarck public schools in January launched their second year of radio broadcasting with a new series of historical sketches known as "Stories Out of North Dakota's Past."

This is probably the most ambitious school-sponsored radio program attempted in the state. The fifteen-minute broadcasts at 9 o'clock every Saturday morning over station KFYZ depict in dramatic form the history of the state from the early explorations of the fur traders in the 1700's to admission into the Union in 1889.

North Dakota, with its colorful background of Indian uprisings, fur traders, missionaries, steamboating on the Missouri and the Lewis and Clark expedition, is a fertile field for historical drama.

The scripts are written by teachers in the schools, two teachers being

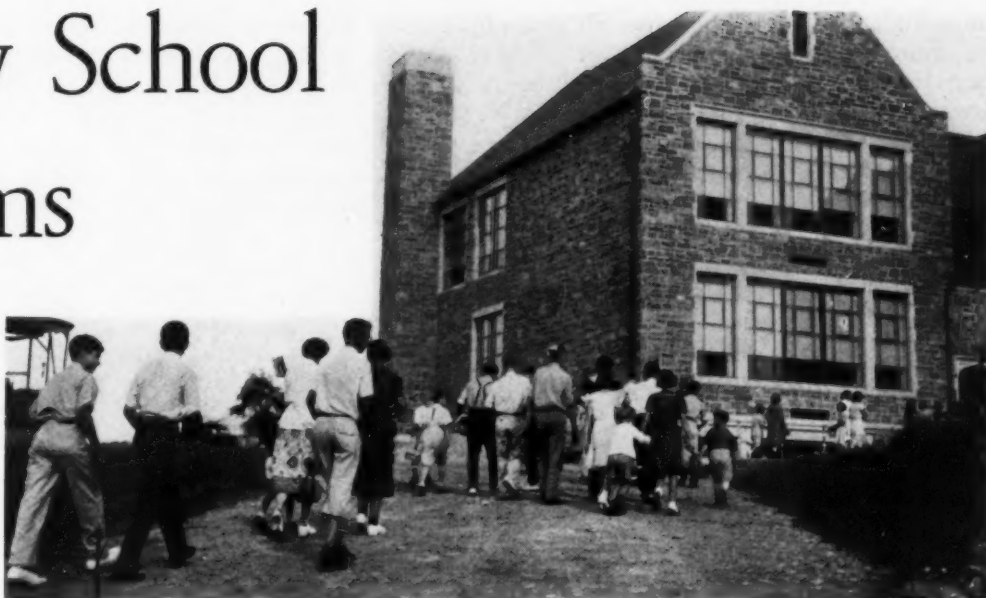
assigned to each topic. A general committee of five supervises their preparation, revising them when necessary. The typing is done by the advanced commercial classes and high school pupils do the broadcasting under the direction of a faculty production manager.

Last year the programs were known as "Our Bismarck Schools," and through them an effort was made to acquaint the public with the various phases of work carried on in the schools, such as music, industrial arts, better speech and athletics. Faculty committees wrote the scripts, chose the cast and supervised the broadcasting of the program. The plan followed this year of leaving production details to a central committee seems more efficient.

Station KFYZ in Bismarck is a 5000-watt station with the second highest antennae in the country.

County School Problems

K. M. WHALEY



THE extent to which a county superintendent may influence the nature and direction of the educational program of his county depends largely upon his ability to command the respect and obtain the cooperation of boards of education, local school heads and teachers. This is especially true in those states in which his powers are limited or indefinitely defined.

The one-room rural school, although rapidly disappearing in the Middle West, is still fairly common. There are 1600 schools of this type in Ohio, according to a recent report of the department of education.

In those counties in which consolidation took place fifteen to twenty years ago the tendency was to establish high schools on the basis of township lines. These small high school units always have been too expensive, but at that time they were about as large as transportation facilities would permit. The school program, limited by a low valuation and small enrollment, is now far too narrow to meet modern needs.

Because of the large number of separate school districts, the county superintendent must plan an educational program with from 10 to 30 boards of education. He must attempt to obtain accurate financial data, plan rehabilitation programs, set up transportation schedules and teachers' salary schedules with as many different fiscal officers as there are boards of education.

Rural board members are, as a rule, successful farmers or merchants of the district. They vary in training from college graduates to men with little or no school training. Their practical farm experience does not make them ready to delegate authority to school executives even in the case of professional problems. Hiring and firing of teachers, selecting textbooks, planning changes in the school curriculum, planning the routing of school buses, no matter how technical the job, most rural boards want a hand in the game.

This fact makes it necessary for the school executive to carry on a gradual and continuous program of education of his board. Here again he often has trouble because in many communities the office of a board member is held for two terms as are local political offices. This frequent change of personnel greatly hampers the program of developing school-minded boards of education.

Although the practice of nepotism by boards is decreasing, it is still prevalent enough to create a problem for the school executive who is attempting to build an efficient and well-balanced teaching staff. Moreover, rural board members are likely to be extremely sensitive to criticism of the teachers, school heads, janitors, bus drivers or any phase of the school program. In consequence tenure in a rural school system is uncertain, the only certainty being that it will be brief.

Superintendent Whaley of Crawford County, Ohio, discusses county school organization and the rural program of development

Low valuations in rural areas seriously hamper the development of a progressive school program. The lack of sufficient funds is, in part, due to the creation of small school units as mentioned above.

There is, however, another contributing factor. With the growth of great urban centers wealth has tended to centralize also. Farm values are low and there is little intangible wealth in rural communities. Public utilities, too, form only a small portion of the wealth. To obtain an adequate income for a good school program will require much larger district areas in the future than those in existence at the present time, even in counties in which much consolidation already has taken place.

The small enrollment and low valuation of rural school districts are the main factors in limiting housing and equipment facilities. A high school with an enrollment of fifty requires a curriculum as broad as one with an enrollment of 500 pupils. Industrial arts, vocational subjects,

music, art and home economics are as much needed by pupils in the small school as in the large. There is a like demand for academic subject areas including college preparatory courses. Well-trained teachers are as necessary for efficiency in the small school as in the large school system. While the needs are the same, actually the small school unit lacks much room and equipment essential to proper teaching conditions. Library facilities are always inadequate and rooms for the special subjects are unsatisfactorily arranged and often inadequately equipped. Rural boards with the background of the "little red schoolhouse" do not readily see the need for materials and equipment that the modern school program requires.

The average training and experience of rural teachers are less than those of urban teachers. The rural school is too often, in effect, a training school for future urban teachers. City school systems replenish their ranks with the better rural teachers. This is made possible, first, because rural salaries are too low to hold the strong teachers and, second, because of the desire of teachers to move into large school systems.

On the whole, rural boards do not consider this teacher turnover as a handicap in the development of their school program for there is still prevalent among rural people the idea that teaching is a relatively simple job and that almost anybody can do it.

The teacher training schools have not recognized the fact that rural people are decidedly different in their customs, patterns of thinking and adherence to traditions and folkways from those who live in large urban centers. There is little or no differentiation in courses for prospective rural teachers and urban teachers. As a result the inexperienced teacher, especially if city reared, finds herself facing sociologic and psychologic problems for which she is entirely unprepared.

As a rule, the local school head in rural communities has been promoted to his position from that of a high school teacher. Frequently he has had no experience as an elementary teacher and no training in either elementary or high school su-

pervision. He lacks the essential background for a clear understanding of an elementary school program.

The county superintendent, consequently, must assume responsibility for developing power of his school heads to plan a program of supervision, evaluate classroom teaching, develop ability of the teacher to discover her own weaknesses and to plan cooperatively with her the solution of their common problems. In short, one of the major requirements of the county superintendent is that of developing a staff of expert supervisors.

As in the case of teachers the executive head of a small rural school is, and should be, desirous of moving up the professional ladder. This creates the problem of turnover of local superintendents or principals. Even though the county superintendent is given a free hand in nominating local school heads, which is not always the case, he still has the problem of adjusting the new school heads in the county program. A 50 per cent turnover of local school heads in a single year is not an unheard of experience for many county superintendents.

The rural family still is a more closely organized group than the urban family. Members of the rural family work together as a unit on the farm. They play together. Consequently, they have more interests in common than have members of the urban family. The rural parent, therefore, has a more direct interest in the experiences of his children and keeps more closely in touch with them. Family ideals, peculiarities of speech and manner, modes of thought, and prejudices are likely to follow a set pattern closely.

The nature of rural family life and of parental supervision creates a unique problem for the teacher and the school administrator. Anything done by the school to disturb family patterns arouses parental opposition. The rural parent does not hesitate to demand changes in teaching procedures especially if the procedures differ from those with which he is familiar. He tends to dislike innovations in the school curriculum.

Clearly defined family patterns are apparent when the rural pupil is ob-

served in the classroom. Discussion of controversial problems touching upon the relation between science and religion, political parties and party measures, sterilization of criminals or the problem of feeble-mindedness requires tact. Rural teachers are likely to avoid these problems altogether or to present them in a manner that results in dualism and consequent confusion.

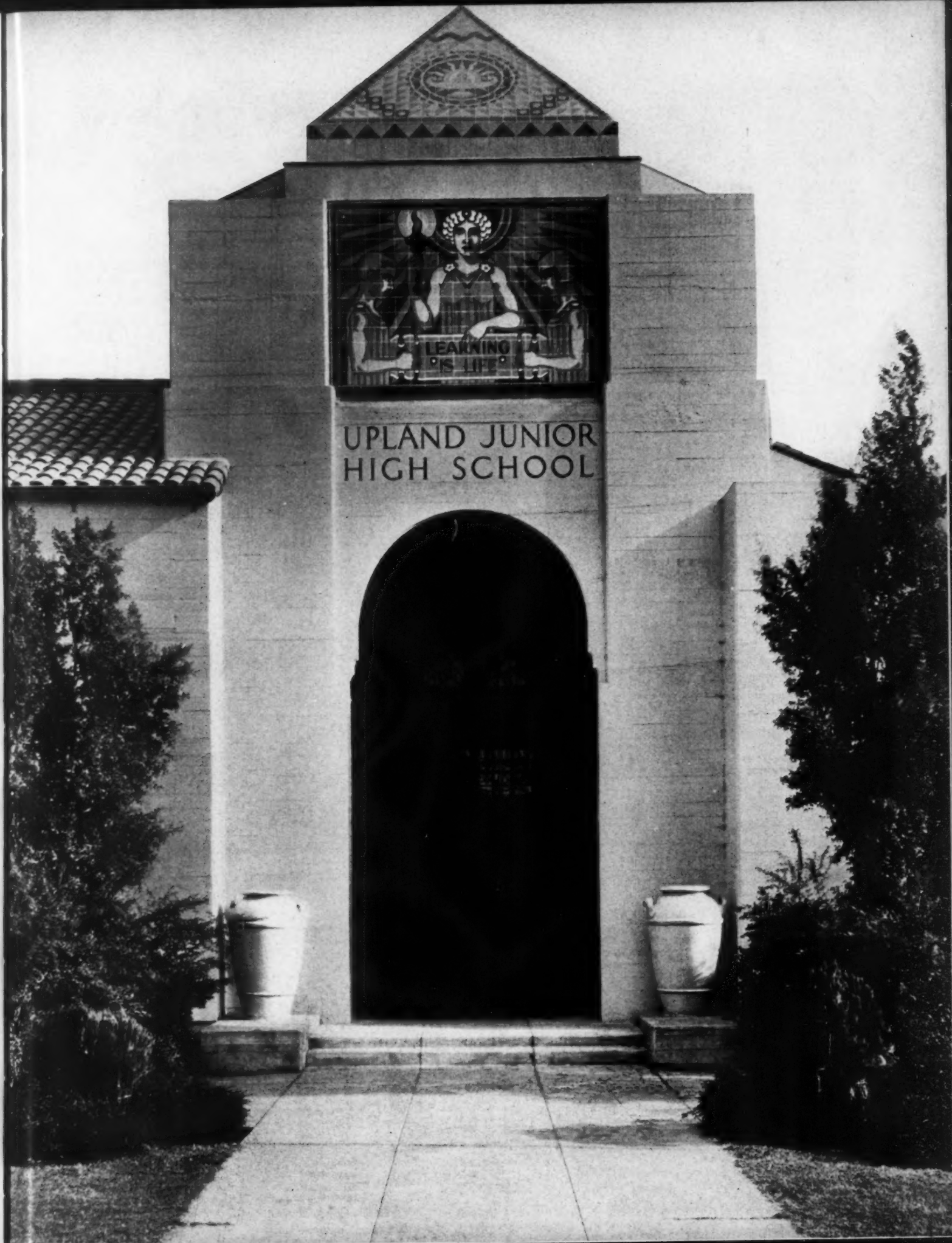
Religious views, political affiliations and preconceived likes or dislikes are more frequently transferred directly from parent to child *in toto* in the rural than in the urban community where the number and spread of social contacts are greater.

One must not, however, draw the conclusion from the foregoing that family influence upon rural children is wholly negative or antisocial in nature. There are a great number of outstanding qualities in the rural pupil that give him a distinct advantage. He is usually ambitious and willing to work. He assumes responsibility quite readily. He is likely to be democratic. He is quite sympathetic and concerned about the welfare of others in his group. He is less impressed by surface manners and show than by real people.

The psychologic and sociologic background of the rural pupil makes him a special type of individual. The teacher or school head who does not take into careful consideration the nature of the rural pupil's background of experience and environment cannot satisfactorily deal with the specific problems of the classroom or school.

CALIFORNIA HIGH

On the opposite page is a photograph of Upland Junior High School at Upland, Calif., designed by Architect G. Stanley Wilson of Riverside. Of monolithic concrete, the building achieves beauty by the simplified design possible with this type of construction. Economy in first cost has also been achieved here.



THE SCHOOL PLANT

Jersey's New

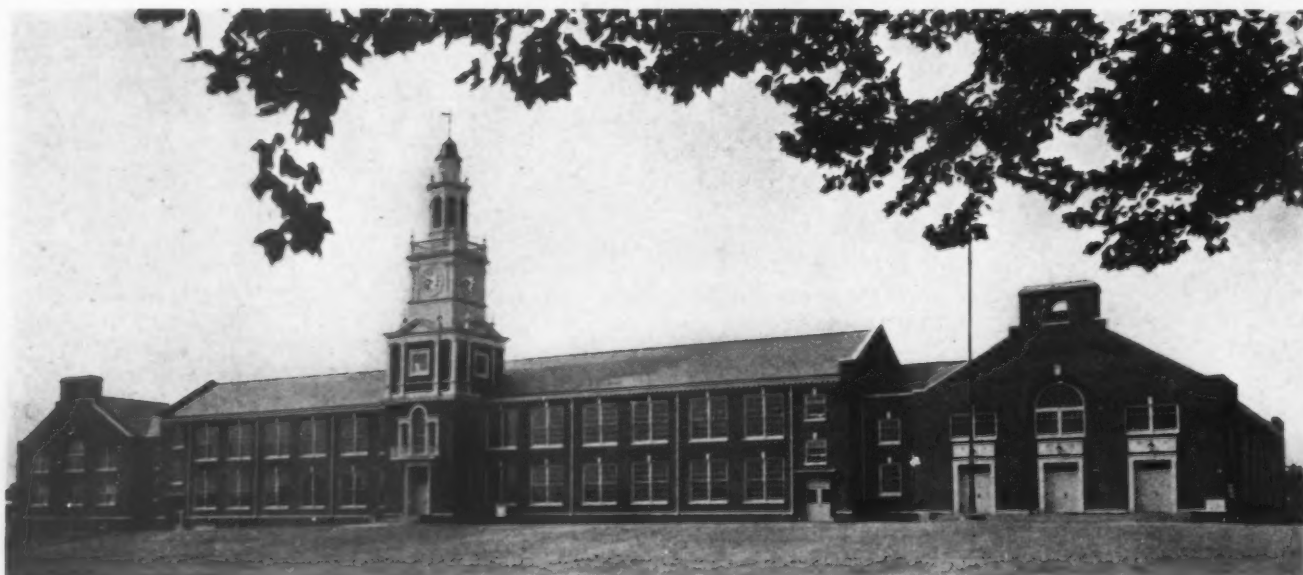
FREDERICK A. ELSASSER, A.I.A.



THE Jonathan Dayton Regional High School, Springfield, N. J., was planned to serve the secondary educational needs of six municipalities, namely, Garwood, Springfield, Kenilworth, Mountainside, Clark Township and New Providence Township, which form the Union County Regional High School District No. 1.

A most fortunate situation existed relative to the location and the acquisition of the site inasmuch as the Springfield board of education

Jonathan Dayton Regional High School in Union County, New Jersey, was erected at a cost of \$538,136, including land and equipment. As designed by Frederick A. Elsasser, it will accommodate approximately 1000 pupils. The tower, shown in detail, reflects the influence of Independence Hall. At right is a view of the women teachers' suite.



Regional High

owned a 5-acre tract, a philanthropic citizen donated $2\frac{1}{2}$ acres, the Springfield Township officials vacated a public thoroughfare consisting of $1\frac{1}{4}$ acres, and to complete the tract $2\frac{1}{4}$ acres were purchased for \$7600.

Another outstanding feature in connection with the location of the site is that the Union County park commission owns a large tract of ground adjacent to these properties, sufficient for every type of athletic activity. These considerations played an important part in the selection of the site.

The building is designed to accommodate approximately 1000 pupils. The pupil capacity definitely sets up the size of the school structure with the exceptions of auditorium, shops and laboratories. The capacity of the school necessitates separate gymnasiums for boys and girls. This structure is so arranged that the individual gymnasiums are the minimum size of 40 by 60 feet so that when folding partitions are opened there is one large gymnasium, 60 by 80 feet.

Owing to limited funds and to the architectural composition it might be said that the gymnasium is small. However, it is believed that this school will grow to a capacity of practically 2400 pupils and will necessitate gymnasiums in the future to accommodate that number. It is then planned that a unit, 90 by 120 feet, can be more readily built and can be divided, which would give two boys' and two girls' gymnasiums.

In planning a regional high school the matter of extracurricular work after school hours is of vital importance because of the bus schedules. Practically 80 per cent of the pupil load of this building must be transported. Therefore, it was necessary to have a building sufficiently flexible so that all portions of the building could be accessible at all times and so that the various activities would not conflict.

It was believed that an auditorium seating approximately 1000 would be



Shops for woodworking and for teaching various trades are placed under the gymnasium, on the same floor as the lunchroom. This arrangement eliminates disturbing noise.

Worktables with moisture and acidproof tops, movable desks and an abundance of space for exhibits are features of the combination chemistry and physics laboratory. Walls are of glazed brick tile.



sufficiently large. The auditorium is so planned that it can be used independently. This also is a feature of the gymnasium, which is above the ground floor, for economy in construction and for better conditions for locker and shower rooms. There is a separate stair from each locker room direct to the outside, so that dirt and mud will not be tracked into the gymnasium.

The lunchroom, which is situated under the gymnasium, seats approximately 450. The kitchen is separated by a solid partition with doors at either end; these can be closed immediately after lunch, enabling the room to be used as a study hall.

Shops are located on the same floor. Eventually they can be moved to the new addition and the lunchroom enlarged as required for the future new addition.

The boiler room has been made large enough to accommodate equipment for future use. Since the building is heated by oil, the question of coal storage is eliminated. The service entrance at the janitors' room is well located for deliveries of general school supplies and for daily kitchen requirements.

On the first floor, flanking the main entrance, are offices on one side and the medical examination room on the other. Commercial departments are close to the school office. The mechanical drawing room is over the shops. Two classrooms adjacent to the auditorium are equipped with lavatories and shades for use as dressing rooms so that large groups may be accommodated. Storage facilities have been provided in the gymnasium and auditorium.



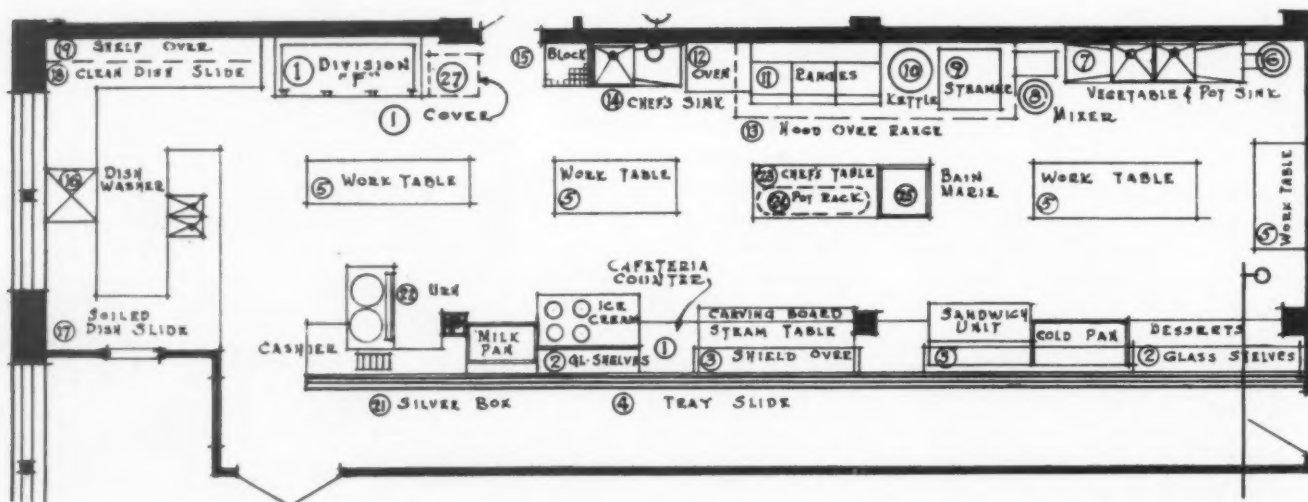
The cooking room is divided into convenient units. Below: A solid partition enables the lunchroom to serve as a study hall. Floor plan of kitchen is shown below.

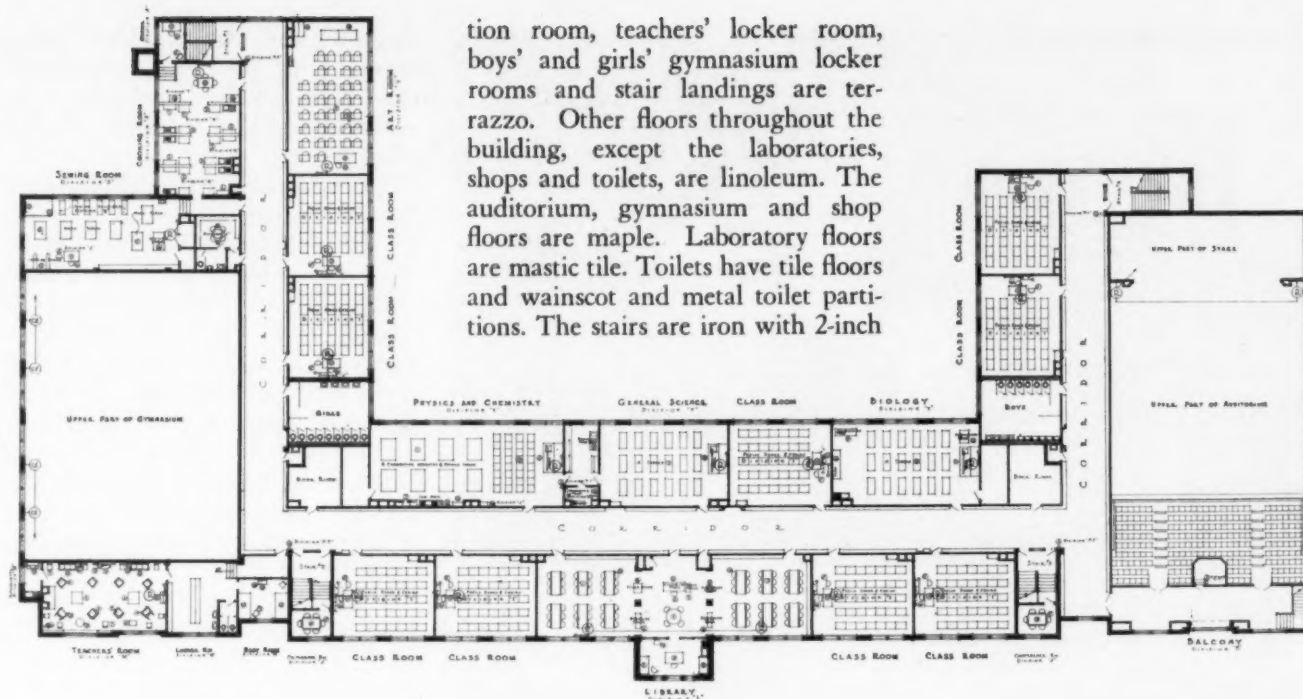


The library is centrally located on the second floor with a portion screened off for work space. Laboratories are also centrally located in the rear of the main building. Sewing and cooking rooms are intercommunicating. The women teachers' suite is off to the corner and isolated to afford complete relaxation.

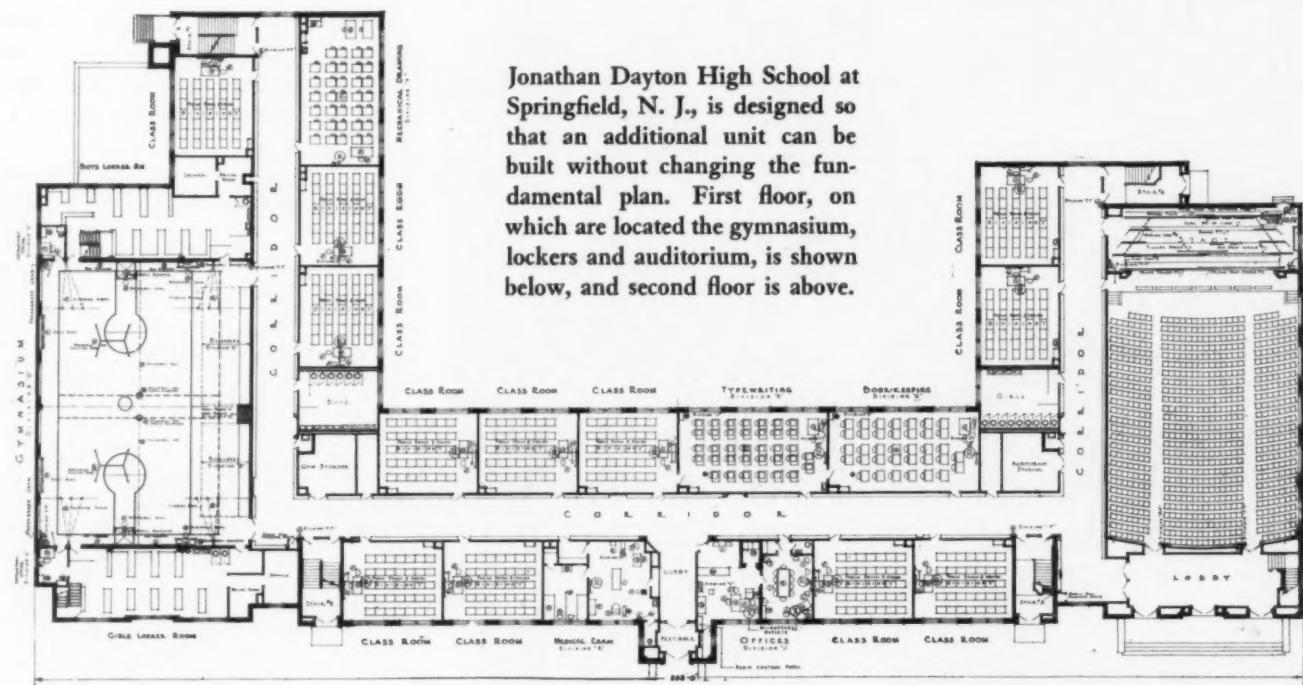
Glazed brick tile, 5 by 8 inches, with cap and cove base has been used extensively throughout this building—at door jams in corridors and on the walls of lunchroom, gymnasium, shops, chemical laboratories, gymnasium locker rooms and stairs. Other wall surfaces throughout the building, except the auditorium lobby walls, are hard finish plaster.

Lobby walls have a solid paneled oak wainscoting, approximately 3 feet high, with applied stiles and rails above, forming large panels; these are covered with oak flexwood so that the entire wall surface is oak.





tion room, teachers' locker room, boys' and girls' gymnasium locker rooms and stair landings are terrazzo. Other floors throughout the building, except the laboratories, shops and toilets, are linoleum. The auditorium, gymnasium and shop floors are maple. Laboratory floors are mastic tile. Toilets have tile floors and wainscot and metal toilet partitions. The stairs are iron with 2-inch



Jonathan Dayton High School at Springfield, N. J., is designed so that an additional unit can be built without changing the fundamental plan. First floor, on which are located the gymnasium, lockers and auditorium, is shown below, and second floor is above.

The finish is silver gray. There are an ornamental plaster cornice and an end niche with a marble tablet. The upper portions of the corridor walls are a sand finished plaster.

Ceilings generally are plaster except in the gymnasium, where the exposed trusses are in view. Ceilings of all corridors, lunchroom, library, typewriting room, chemistry and physics room are treated with acoustic tile, $\frac{3}{8}$ of an inch thick.

All floors throughout the corridors, lobby, lunchroom, medical examina-

blue stone treads. The showers for both boys and girls are gang type with tile floors and walls.

The building is steel framed with outside bearing walls, except for columns supporting the auditorium and gymnasium trusses and tower. The ground floor and a portion of the first floor are built on grade or dirt fill. The floor foundations for these floors consist of a 4-inch concrete base screened to a smooth surface, over which is installed a $\frac{1}{2}$ inch of insulating material thoroughly em-

bedded and covered with hot asphalt. This material serves as an insulation. Over this insulation has been installed the necessary fill required to bring the finished floors to the desired height, which generally consists of about 4 inches.

The second floor and a portion of the first floor is tin pan beam and slab reinforced concrete construction. Pitched roofs are steel framed with 2 by 8-inch wood rafters; flat room construction is of 3 by 14-inch wood rafters. The entire roof surfaces are



Ample provision is made for medical emergencies. The medical department is located on the first floor and includes equipment for dental work.



Ceiling of the typewriting room, above, is treated with acoustic tile. The sewing room, below, adjoins the cooking unit in the economics suite.



sheathed with wood. Metal bases generally are used where plaster occurs. Doors are of the flush type, veneered and most of them are finished in silver gray.

The building is Colonial in design, the inspiration for which was derived from Independence Hall. Walls are Flemish bond selected common brick. Window sills and miscellaneous stone trim are limestone. The cornice and tower trim are of wood with copper linings, decks and flashings. The tower is used in connection with the exhaust ventilation of the central portion of the building. The two end chimneys also are used in connection with exhaust ventilation.

The unit system of ventilation has been used throughout most of the study rooms. There are two central fan systems, one serving the lunch-room and manual training room, the other serving the auditorium. The auditorium also has an exhaust system of ventilation forcing fresh air in at the ceiling and exhausting it through registers close to the floor. Direct radiation also is used in most rooms except the shops, gymnasium and locker rooms; these have heat units enclosed in ducts forming recirculating registers near the floor. Toilets, chemistry and physics room, cooking and girls' and boys' locker rooms are equipped also with mechanical exhaust ventilation.

The total appropriation from P.W.A. funds was \$533,136, to which can be added \$5,000 for state aid for domestic science and manual training equipment. The building contains 1,400,000 cubic feet. Itemized breakdown of costs follows:

BUILDING COSTS:	
General Construction	\$285,696.50
Steel and Iron	30,994.00
Plumbing	17,319.00
Heating, Ventilating	52,171.00
Electric	30,047.00
	<hr/>
Architects' and Engineers' Fee	416,227.50
	24,973.65
	<hr/>
Clerk of Works Salary	441,201.15
	5,200.00
	<hr/>
Total Building Costs	\$446,401.15
Equipment	58,374.90
Architectural Fee (Equipment)	3,502.49
Land	7,600.00
Interest During Construction	13,347.78
Legal and Administrative	6,852.32
Telephone, Insurance and Misc.	2,057.36
	<hr/>
Total Loan and Grant, and State Aid	\$538,136.00

Accent on Personality

MABEL ARBUCKLE

THE institutional character of school interiors can be eliminated and a domestic atmosphere created by simple and entirely possible changes even within the most traditional types of school architecture.

There are a few fundamental art qualities to be considered and used: If the ceiling is too high and the room openings are high and narrow, the simple device of carrying horizontal bands around the room will decrease the apparent height. If the height line of the blackboard, doors and cabinets, can be carried around the room this will help decrease the height feeling. Horizontal spacing in walls, openings and cabinets makes for a feeling of comfort and

domesticity; while vertical spaces such as heights in skyscrapers and church towers give the feeling of grandeur, awe and majesty.

In schoolrooms we attempt to bring to the child a feeling of security, domesticity and social well-being.

It is important to child life that there be as little break as possible between home and school. School is an artificial situation at best. We, as educators, should do all possible to make the school environment intellectually stimulating and socially

Personality enters the classroom. This art room in a Detroit elementary school, well designed for activity, has adequate light provided by one wall of windows. There is a charming view of a garden court planned by the children.



Process charts help to clarify technics in the art room. This varied material is unified with strips of colored paper, large contrasting letters and colored paper mounting. On the table is grouped related material typical of Mexican handicrafts.

happy. Only in this way can the child become well-rounded emotionally, intellectually and socially.

The large number of underprivileged children to whom the school is home in the truest sense also should be considered. There is no valid excuse for the drab and uninviting schoolroom so universally

toward one. If the four walls seem to advance, naturally the room will seem to become smaller. Cool colors are receding colors and seem to move back into distance. The blue sky and purple hills are far away, so it is that cool colors make the room seem larger because the walls appear to move back or recede.



An elementary art room with movable equipment. In the background is a cabinet constructed by primary grade children to take care of chalk and crayons. Tin coffee tins are painted to harmonize and are placed in the cabinet.

seen. Paint is not costly and the poorest community can work a miracle in the schoolroom with a few cans of paint and "the will to do."

Color affects people emotionally and it is well to understand a few basic principles regarding its use. There are two classifications of color in the spectrum: warm colors and cool colors. The warm colors are yellows, oranges, reds; the cool colors are blues, greens, purples. In an open, sunny, warm exposure, one may use the cool colors to counteract heat and light. In a cool and dark exposure, the warm colors will bring light and warmth into the room.

There is another quality to be considered relative to these warm and cool colors. Warm colors are advancing colors, *i.e.* they seem to come

Colors have other influences on people, which may be indicated briefly and generally. Warm colors are exciting while cool colors induce a feeling of repose and sometimes depression. This pertains to the use of bright or full intense spectrum color. Colors can be grayed, lightened or darkened. When this is done the effect of the bright color is decreased and neutralized. To lighten color add white. To darken color add black. To gray or neutralize color add some of the complementary or opposite color in the spectrum.

The three-color spectrum is a simple and basic aid in color mixture. Draw a triangle with apex at the top. Place yellow on the apex, blue on the right angle and red on the

left angle. Over this triangle draw a second triangle with the apex at the bottom. Place purple on this apex, green at the right top angle and orange at the left top angle. Locate the center of these two triangles and place there a gray or full neutral. A line drawn straight through any one color and the center gray gives the complement of the color.

By adding more or less of the complementary color, the color is more or less grayed, as desired. For example, a grayed green is attained by adding more or less of its complement red; to attain light gray green, add white; to attain dark gray green, add black.

Full intense spectrum colors may be used to vitalize the color scheme; chairs, stools, edges of desks or tables may be in bright colors against the more subdued wall colors. If the woodwork is out of scale, *i.e.* too heavy or too dark, paint the walls and woodwork the same color and value. This will decrease the importance of the wood trim and door openings, also cabinets and blackboard frame; they take their place in the room as background. If the ceiling is high, paint it the same color as the walls to bring it seemingly lower; if it is very high, paint it two tones darker than the wall.

The wall can be painted in horizontal bands of values of the same color to decrease apparent height. "Value" is the term meaning light and dark of a color. The wall might be painted a dark value up to about 2 feet from the floor; a band of the same color two or three or four tones lighter and about 3½ or 4½ feet wide may be carried around the wall just above the darker color; above this second band the rest of the wall may be painted a third value two or more tones lighter than the middle band of color. The ceiling may be of that same third color or two or more tones lighter than the third lighter tone on the walls.

These band widths are suggestive only and should be changed to make good and interesting proportions on the wall according to its total height measurement. This is a more pleasing wall treatment than the dark wainscoting used so often below a

light wall color. The wide bands of color make a pleasing color transition of greater interest and of some economic value, *i.e.* saving soil and frequent repainting.

Another interesting wall treatment that may be used is to paint one wall a different but harmonizing color or a darker value of the same color. The wall that is called the front wall of the room might be so treated, making it more important and adding interest to the decorative treatment. For a southern or warm exposure, a room may be painted a light gray with one wall in a slightly darker tone of blue; bright blue bands may outline edges of desks or tables, and chairs or stools may be painted in the same blue. Light warm red (sometimes called Chinese red) accents could be used for accessory details, such as blotter on the teacher's desk, pottery bowl, flower pots.

Keep the background simple in color and design. The aim is to eliminate contrast of wood trim and wall. Usually the wood trim is heavy, dark, depressing. Blackboards are dark and gloomy. Traditional schoolrooms have much blackboard space. Keep just as much as needed, no more. Have it removed from the wall or painted over with wall color. If possible, have a composition board or corkboard placed over some of this blackboard for exhibit space. Use this for children's work of interest and also have exhibit board space for up-to-date, ever changing reference material.

If it is not possible to have such exhibition board, paste craft, bogus or other good neutral color paper to the blackboard or wall, using rubber cement on one surface only, *i.e.* either on the paper or on the wall. This can be removed and the cement rubbed off with a clean cloth without leaving a mark on the wall.

Arrangement of the material on the exhibit board is important. Printed labels giving important information are essential; use a broad lettering pen and ink or colored crayon for lettering. Use colored papers to tie the material together or use it back of some of the important material. Keep vacant spaces or "rest" spots in arrangement. Plan the arrangement. Do not mount or place material without a plan.

Keep the reference material up to date and related to the instructional program. The reference material should stimulate interest and research and should widen the child's outlook. Bring reports and illustrative material concerning community, national and international up-to-the-minute events into the schoolroom.



First impressions of the school building should be pleasing. Colors carefully selected add greatly to the appearance. Glass cases should be carefully arranged with material related to the interests of children and changed frequently.

The glass cases inset in the room or corridor should be carefully arranged with interesting materials and frequently changed. Labels should be carefully lettered to explain the material. Colored and metallic papers should tie the parts of the exhibition together. Metallic papers add zest and life to an exhibition, but should be used sparingly. In general, silver paper harmonizes with cool colors while gold paper agrees better with dark, rich and warm colors; green-gold is good with greens and red-gold with reds and purples.

In making poster announcements for use in the hall, keep to simple, plain and direct lettering. A little practice with a broad lettering pen will give facility in this work. Avoid fancy lettering and fantastic design. A few lines of color may be added to tie the parts of a poster together and to assist in creating attention value.

Storage space is a crying need in the traditional school. How to solve this problem calls for resourceful-

ness. The built-in furniture of contemporary architecture and interior furnishing offers many suggestions.

Open cabinets may be designed and built from orange crates or boxes. These should serve the needs of the particular classroom for books, materials and illustrative projects. We use these boxes in art rooms in

both old and new buildings. A desirable feature of the open cabinet is that children can select materials needed and may be stimulated to try a variety of materials on their own initiative. Tin cans, glass jars, wood boxes and many kinds of containers may be used to care for materials.

Boxes or small barrels are used for storage of large rolls of paper, such as group murals. All these are painted to conform to a room color scheme. The labels are simple, legible and in harmony with the total color scheme. Process charts or "how to do" suggestions are organized by the children under teacher guidance. These charts are mounted on the wall near the storage space provided for the material. Finished projects also are shown in connection with this grouping.

Growing plants are desirable both for their decorative value and living interest for the child. Small plants are lost in a large room. To offset this there should be groups of plants. These may be arranged in contain-

ers made of zinc and painted on the outside. A terrarium or a garden in large glass container, placed on the window sill, is a constant and changing source of interest and decorative value.

Do not use window sills for exhibit or storage. Keep them clear and clean except for growing plants or material needing light for effective display. A row of chemistry bottles may be placed on a window sill. These should be partly filled with colored water. The spectrum colors may be demonstrated in this way: yellow, orange, red, purple, blue and green. Mix the water with dye of the respective spectrum color. Other color mixtures may be made showing the steps between these colors. Let children experiment with this problem. This provides a gay decorative note in the room.

Arrange one space at least, on the wall, for a picture. Hang the picture near the eye level using two perpendicular wires for hanging or a nail back of picture with no wires showing. Choose a reproduction of a good modern painting by Matisse, Picasso, Van Gogh or some recognized artist of the contemporary movement. Children will react to modern painting even though the teacher may not like it. Such a teacher should begin studying modern painting, sculpture, architecture and other contemporary art expression. She is living in the past if she takes the attitude of disapproval of the present significant movement.

It is not through teaching of drawing or of history of art that good taste in choice of everyday needs can be developed, but it is through conscious evaluation of color, form, line and texture in all our environment.

The environment of the school itself is a powerful incentive and factor in this development of taste. Simply to improve environment is not enough; children must be made aware of the problem involved, know the reasons and possibilities for improvement. The children should assist in planning color for the schoolroom, the arrangement of the equipment for convenience and use and the arrangement of exhibits. Let them have a voice in selection of the picture, always giving them a number of wisely selected prints

from which to choose. Discuss the content or subject interest but also discuss the picture pattern or design and color interest.

Select pictures from the standpoint of art qualities, not from personal sentimental likes or dislikes. Exchange pictures from the corridor or other rooms. Gradually build up a portfolio of prints for the room. Change prints in the frame frequently and accompany them by discussion with the children. Prints

may be selected related to season, curriculum and community interests. Frequent changes in the room stimulate interest and vitalize the whole room and school situation.

Apply art knowledges to all the realities of everyday life. Only in this way can there be made any improvement in standards of living. The environment of the school should be a vital influence for the enjoyment of beauty and the desire for it in the life of every child.

Measures Cost of Transportation

AN ANALYSIS of the cost of pupil transportation made in connection with the recent federal study of local school units in California is reviewed in *California Schools* by George C. Mann, chief of the division of adult and continuation education of the state department of education.

Data on expenditures for pupil transportation during the school year, 1934-35, taken from the federal study were furnished by individual school districts to the survey staff of the federal project. The figures presented are for operating expenses only and do not include expenditures for equipment.

The total expenditure for pupil transportation by elementary school districts and high school districts during the school year 1934-35 amounted to \$2,728,223. Of this amount \$1,093,203 was for elementary school pupils and \$1,635,020 for high school pupils.

The cost of the transportation of 66,623 elementary school pupils was less than the cost of 55,592 high school pupils, largely because the average daily mileage of elementary school pupils was less than that of high school pupils, and more elementary school pupils than high school pupils can be accommodated in buses of given size. For the state as a whole the average daily mileage of elementary school pupils transported was 14.7 miles, and of high school pupils, 19.3 miles. The average daily mileage of elementary school pupils ranged from 4.8 miles in San Francisco city and county to

23.7 miles in Mono County; and for high school pupils, from 6 miles in San Francisco city and county to 55.5 miles in Tuolumne County. In fifteen counties the average daily mileage of high school pupils exceeded 25 miles.

The annual per pupil costs for transportation varied greatly among counties. The range of expenditures per pupil for transportation in elementary schools was from \$6.41 in San Francisco city and county to \$48.18 in Alpine County, with a median of \$16.30. The range of expenditures per pupil for transportation in high schools was from \$9.66 in San Francisco city and county to \$94.12 in Mariposa County, with a median of \$30.27.

Many factors enter into the determination of the annual per pupil costs of transportation, such as length of school term, average number of pupils transported daily, average number of miles pupils are transported, road conditions and type of vehicle used. The following formula was used in this connection:

$$\begin{aligned} & \frac{\text{Total Annual Cost of Transportation}}{1} \\ & \times \frac{1}{\text{Average Number Transported Daily}} \\ & \times \frac{1}{\text{Length of Term}} \times \frac{1}{\text{Length of Route (one round trip)}} \\ & = \text{Cost per Pupil, per Mile, per Day} \end{aligned}$$

By using this formula the average per pupil mile cost for the state was found to be \$0.00757; for elementary schools, \$0.00632; for high schools, \$0.00865.

Appraising for Insurance

HARLIE GARVER

DESPITE the uniformity existing among schools in matters of administration generally, there is a surprising degree of variation in handling fire and windstorm insurance. There are flat rate insurance, co-insurance and self-insurance.

Insurable values are arrived at by professional appraisal companies, by insurance agents and by board members themselves. In some schools the same insurance rates have been in effect for many years; in others, a watchful, intelligent policy has steadily reduced the premiums while increasing the coverage.

Yet the fundamentals of a sound insurance procedure are neither complicated nor difficult to attain. The superintendent in the average or smaller system can, with a reasonable amount of study and effort, place his insurance upon a sound basis comparable to that of school systems large enough to hire an expert.

An efficient policy for handling school fire and windstorm insurance will include the following: (1) accurate appraisals of school property, periodically corrected; (2) adequate coverage for both fire and windstorm losses, at the lowest possible rates; (3) proper distribution of policies and premium dates, together with complete records of all transactions, and (4) frequent inspections, with elimination of all unnecessary charges for remediable hazards.

At this time the discussion will be limited to the first requisite.

In one instance, following the total loss of a school building, difficulties resulted when the insurance adjusters set to work. The superintendent called together the twenty or so teachers who had occupied the building and together they sat around a table and tried to remember what equipment had been in each room. They tried to recall how many pictures there were on the wall in the study hall and whether the teachers' desks were single or double pedestal. Naturally, the school district lost heavily through this circumstance for a number of items were omitted.

These difficulties would have been eliminated had there been an accurate appraisal of school property at the time of the fire. It is entirely possible that the cost of the appraisal would have been saved many times both in the insurance premiums paid previous to the fire and in the adjustments afterward.

Probably the most desirable appraisals are those made by reputable appraisal companies; the cost is not prohibitive. Usually such concerns will appraise both buildings and contents at a cost of from one-fifth to one-tenth of 1 per cent of the sound value. The expense will, of course, depend greatly upon the information available to the appraisers, for the cost is on a time basis, \$50 per day being an average charge.

It is possible in most cases to conduct a self-appraisal at a minor fraction of the cost of a professional appraisal. Since the work is done by persons directly interested in the schools, the information concerning equipment may be even more acceptable to the insurance adjusters.

If a self-appraisal is attempted, probably the best estimate of building values can be made by an architect, particularly if the plans, specifications and contract prices of the

original structure are available. Often the local general contractor, plumber and electrical contractor can be enlisted. If they happen to be the ones who constructed the building, they may do the work gratis. In any event the aggregate cost is likely to be much less than when done by professional appraisers and the results just as accurate.

Equipment appraisals and estimates of supplies can best be made by school officials themselves, since they are usually acquainted with replacement costs. Since the forms required do not justify printing because of the small number used, they can be made by the duplicating department of the school at a very small cost.

The forms used for arriving at building values will depend greatly upon the method used and the persons doing the work. Generally architects or contractors will compile the same information as when making a bid, so they will use sheets common to such work. Their estimates will consist largely of the costs of materials, labor and overhead.

In this connection it is well to check the prices of labor to see that they are applicable to the local community, since there is considerable variation in this respect. Costs of materials, however, are much more stable for a given locality.

The estimates necessary for a building appraisal will usually consist of the following, total replacement costs being given in each case: (1) general contract; (2) electrical construction contract; (3) heating and ventilation contract; (4) plumbing and sewerage contract; (5) subsequent additions to the building, if not included in the foregoing, and (6) fixed equipment included in the building appraisal.

In connection with the last item, it is essential to include with the building costs the value of all fixed

The first step in an efficient insurance program, according to Mr. Garver, superintendent of schools, Union City, Ind., is an accurate appraisal of school property, periodically covered. In a forthcoming article he will discuss three other insurance requisites

Form A ROOM EQUIPMENT INVENTORY Date Sept. 1, 1936

Building Lincoln Room 6 Teacher R. Adams

	No.	Age	Cond.	Type	Cost	% Dep.	Actual Value
Teacher's desk, single pedestal	1	5	a	a	21.00	20	16.80
Teacher's desk, double pedestal	30	10	a	b	120.00	40	72.00
Pupil's desk, non-adjustable	10	5	a	a	67.50	20	54.00
Pupil's desk, adjustable	2	2	a	a	6.50	10	5.85
Chairs, bentwood							
Chairs, square type							
Primary chairs							
Folding chairs							
Tablet arm chairs							
Reading table	1	1	a	a	12.00	5	11.40
Sand table							
Book case (movable)	1	2	a	a	40.00	5	38.00
Cupboard (movable)							
Clock	1	10	b	a	5.00	50	2.50
Pictures	4	10	a	a	8.00	20	6.40
Piano							
Radio							
Victrola	1	15	b	b	75.00	60	30.00
Globe and pedestal	1	5	b	a	10.00	20	8.00
Maps (list total number)	4	2	a	a	20.00	10	18.00
Window shades	6	1	a	a	21.00	10	18.90
Chart sets							
Waste basket	2	10	a	a	.65	30	.46
Pencil sharpener	2	3	c	b	2.00	50	1.00
Dictionary and stand	1	5	c	c	21.00	75	5.25
Flag	1	2	b	a	1.50	20	1.20
Thermometer	1	10	a	a	.50	10	.45
<u>Chairs</u>	15	2	b	a	2.25	50	1.13
<u>Shurpion</u>	1	5	a	a	60.00	20	48.00

Note: Designate condition: "a" excellent, "b" fair, "c" unfit for use.
Designate type: "a" up-to-date, "b" medium, "c" obsolete.

equipment, such as desks screwed to the floor, railings, clocks, bells, storage cupboards permanently anchored and other like equipment, since the insurance rates are lower for buildings than for contents. Furthermore, this precaution conforms to general practice and the items suggested are usually mentioned in the policies. Consequently, failure to take advantage of this fact when determining values for coverage simply adds more to the cost.

In the first compilation of figures for determining the sound value of the building, the problem of exclusions will be encountered. Most authorities agree that the following are uninsurable and therefore should be excluded from the totals: (1) architects' and engineers' fees; (2) cost of excavations for the building; (3) brick, stone or concrete foundations below the basement floor, or below the surface of the ground where there is no basement; (4) foundations of machinery or boilers below the surface of the ground.

Naturally, failure to exclude these items means overinsurance and higher cost. If there is a specific exclusion clause in the policy, such items cannot be made part of a claim.

Insurable contents of a building will consist of equipment and supplies.

Since these items consist of innumerable details it will facilitate the work greatly to devise forms upon which to compile the information. These forms, filled out in duplicate, constitute part of the two bound copies of the appraisal to be filed, one in the superintendent's office and the other preferably in a lock box at the bank.

Form A is for use in the ordinary classroom. It contains nearly all of the items commonly found there with blank spaces for extras. Form B is just the same as form A, except that the space for the naming of items is ruled and left blank. This form is used for laboratories and other rooms where most of the equipment is of a special nature.

Form C is a blank for listing supplies and consists of ruled spaces with column headings as follows: (1) article, (2) description, (3) quantity on hand, (4) average quantity, (5) unit price and (6) total price, using column 4.

When compiled room by room these various forms will include all the equipment and supplies in the

building. Furthermore, practically all of these forms can be filled out by teachers and janitors with little effort, so the time element is not important.

In arriving at costs, it will be found convenient to establish a standard price for all the usual pieces of equipment. This simplifies greatly the placing of values on the appraisal forms. The prices are made up into a master list, which is incorporated into the appraisal itself.

Practice varies greatly in arriving at sound values because of depreciation. However, nearly all appraisal concerns and insurance adjusters agree that there are three chief elements to be taken into consideration: (1) the useful life of the building or equipment, (2) its physical condition and (3) obsolescence.

The useful life of most school buildings is considered to be fifty years, although a frame building might indicate less and a stone structure, more. For each year of age, therefore, 2 per cent is deducted. For most school equipment an average life of twenty years would be reasonable, thus making a deduction of 5 per cent for each year of use.

The physical condition of buildings and equipment is an equally important factor, for it is conceded that proper care of a well-constructed school may increase its useful life twenty-five years. The sound value of such a building is greater by reason of good condition.

Obsolescence usually consists of two factors: (1) the up-to-dateness of the building or equipment with respect to its adaptability to modern methods, and (2) its suitability to the purpose for which it is used. Thus, an abandoned bus garage would not make a suitable classroom, although it is almost new and in excellent condition.

As to the importance of these three factors, opinion will vary, but a review of authorities indicates that the following proportions may be assigned: age depreciation, 40 per cent; condition, 40 per cent, and obsolescence, 20 per cent.

As an example of the manner in which depreciations are figured, let us assume that a given school building has a net replacement value, after exclusions, of \$100,000. It is 10 years

old and its condition is such that extensive repairs are needed, but it is well adapted to its purpose.

The results of depreciations may be:

By reason of age, 10/50, or 20% of 40%	8%
By reason of condition, 40% of 40%	16%
By reason of obsolescence, 5% of 20%	1%
Total depreciation	25%
Net replacement value	\$100,000
Depreciation	25,000
Sound insurable value	75,000

In form B these three factors are used, but to save confusion the word "type" is substituted in each case for obsolescence.

When all the various forms and estimates are completed they can be assembled into a loose-leaf volume so arranged that the various pages can be corrected or added to in future years.

For convenience, a table of contents will embrace such a scheme as follows: index; forms A, B and C for each room as required; master sheet of prices for school equipment; estimates for the various building contracts; summary of contents of building, showing values to be separated for inclusion with the building; additions to the building not included in estimates and summary of building values including: (a) replacement values, (b) exclusions, (c) net replacement values, (d) depreciations, (e) net sound insurable value of building, (f) net sound insurable value of inclusions of fixed equipment, (g) total sound insurable value of building and inclusions, and (h) percentage values for co-insurance, if used.

It is particularly important that duplicate copies of the appraisal be made and especially that they be kept in separate buildings. In case of disaster the chance that both may be destroyed is eliminated.

It is sufficient that appraisals be checked at least each three years. Checking of contents will be a simple matter, but building values will be more difficult. In the latter, two factors are important: (1) additions to the building, which increase the insurable value, and (2) variations in construction costs, which influence

replacement values of the building.

After a period of three years prices of labor and materials may have advanced so that it will cost 15 per cent more to replace a given building than it was originally estimated. Building values for insurance purposes must be altered to meet the new conditions.

The attitude of insurance officials toward appraisals may well be mentioned here, for much of their value hinges on this point. However, there need be no fear on that score, for insurance adjusters are always willing and anxious to settle claims on the basis of complete information.

In the absence of an appraisal the adjuster must first ascertain the facts regarding the property damage. He is in the dark both as to the actual property destroyed and as to the judgment of the insured concerning it. The appraisal not only presents the facts upon which to base a claim, but it also saves the time of the ad-

justers. In the average fire that is a sizable factor in the expense.

Master Sheet of Prices

ROOM EQUIPMENT INVENTORY

Teacher's desk, single pedestal	\$17.50
Teacher's desk, double pedestal	21.00
Pupil's desk, nonadjustable	4.00
Pupil's desk, adjustable	6.75
Chairs, bentwood	3.25
Chairs, square type	3.00
Primary chairs	1.75
Folding chairs	1.50
Tablet arm chairs	5.00
Reading table	12.00
Sand table	20.00
Clock	5.00
Pictures	2.00
Globe and pedestal	10.00
Maps (list total number)	5.00
Window shades	3.50
Chart sets	5.00
Waste basket	.65
Pencil sharpener	1.00
Dictionary and stand	21.00
Flag	1.50
Thermometer	.50
Fire extinguisher	5.00
Erasers	.15

Federal Bill for Buildings

RAYMOND V. LONG

THERE is a distinctly felt need on the part of school administrators and architects for a much larger advisory service in the U. S. Office of Education that will aid the several states in school building programs.

Such a service in the Office of Education should advise and cooperate with the states in organizing and conducting surveys, in furnishing them with information concerning schoolhousing problems and planning school buildings, and such other advisory services as are directly helpful in solving schoolhousing problems.

Additional federal aid as contemplated in Senate Bill 3529 is essentially necessary for the development of this service.

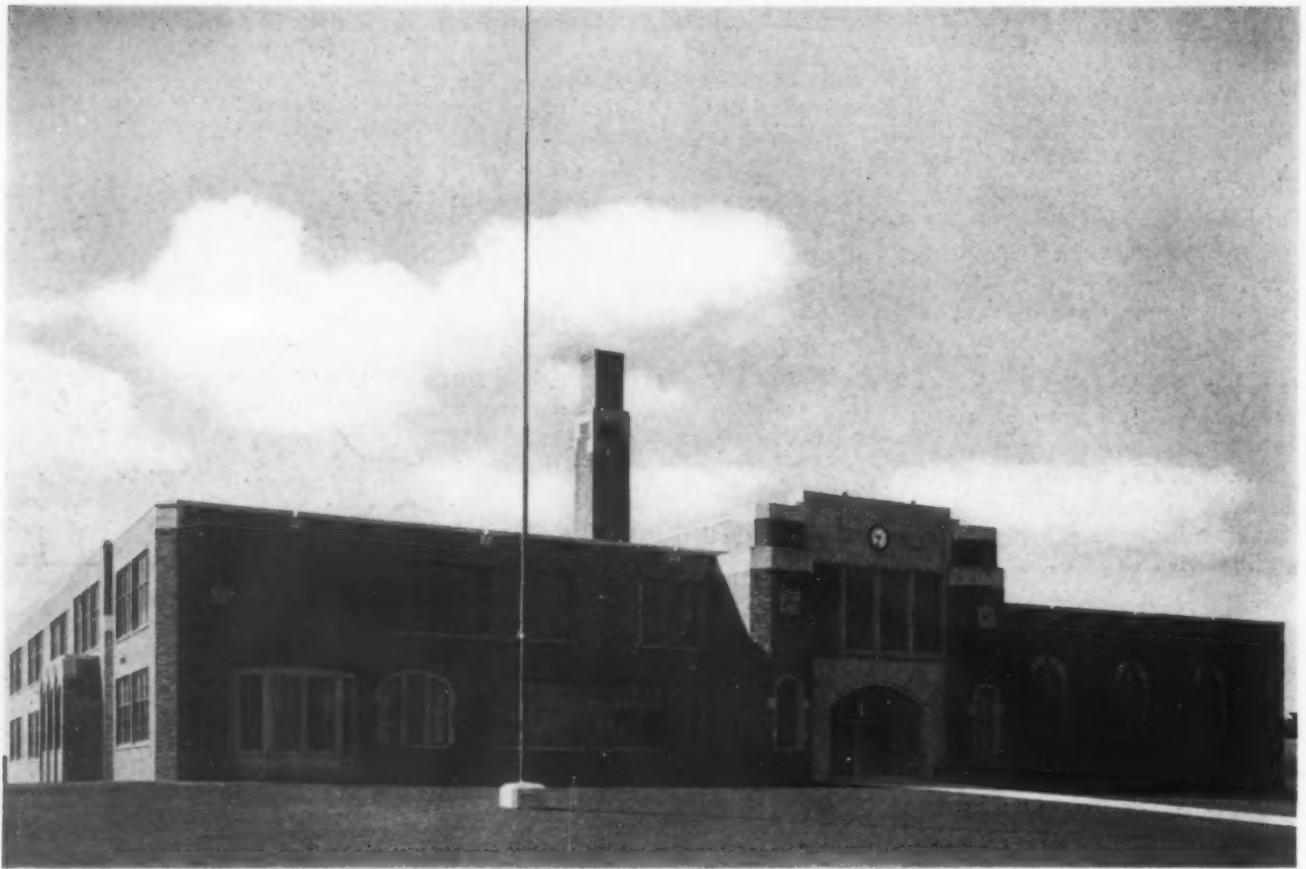
The bill now before Congress "to provide for assistance to the several states in the development of public school facilities," if passed, will aid public education through the development of necessary school building construction, thus releasing money that must otherwise be spent from local funds for other educational pur-

poses. Such federal aid as administered under P.W.A. generally was highly satisfactory and was the cause for little controversy, such as usually develops when federal aid for education is contemplated for instruction programs.

Federal aid for school buildings, if administered in terms of the provisions of the bill, will enable the Office of Education to render real advisory service to the states, and will in turn enable the states to render an advisory service to the administrative units within the states that will go far by way of a successful solution of many conflicting school building problems. Furthermore, it will enable local administrative units to plan and construct school buildings that will more nearly conform to present day demands and contemplated future demands on public education.

Only 19 states make any provision for advisory school building service to local communities through their state departments of education at the present time, it is found.

A Community Center, Too



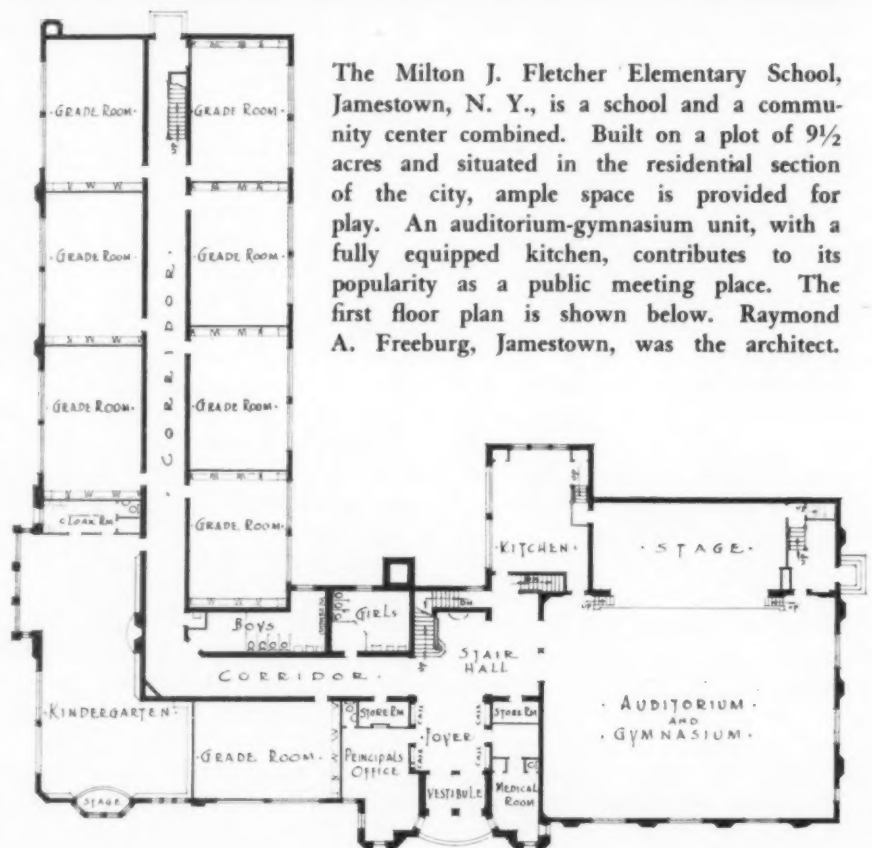
GEORGE A. PERSELL

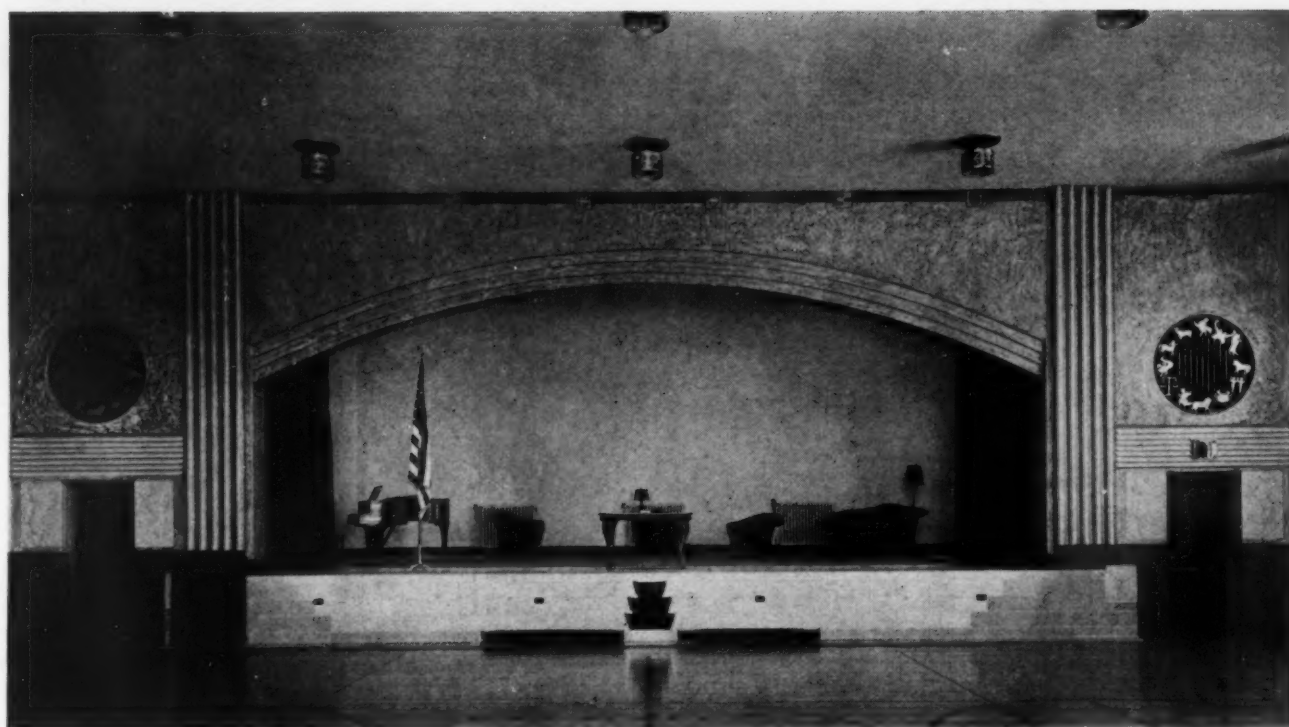
THE Milton J. Fletcher Elementary School in Jamestown, N. Y., was planned and equipped for the most modern methods of teaching as well as for a community center. It is located on the outskirts of the city in a strictly residential section on a large plot originally purchased as a site for a senior high school. The plot contains approximately $9\frac{1}{2}$ acres, providing ample room for play.

The exterior design is Tudor English, two stories high, and built of a light brown range of face brick with trim of manufactured cut cast stone. Width of the building is approximately 180 feet, and its length, 182 feet.

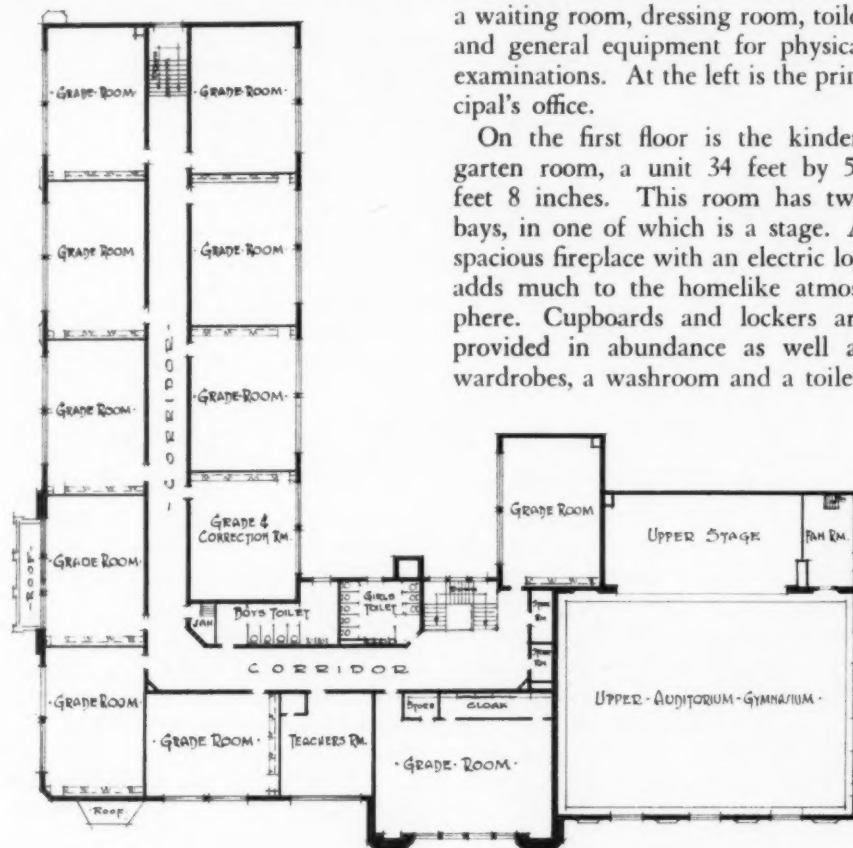
There are twenty grade rooms. Six of these are above standard size, being 34 by 22 feet. The others are 32 by 22 feet.

The Milton J. Fletcher Elementary School, Jamestown, N. Y., is a school and a community center combined. Built on a plot of $9\frac{1}{2}$ acres and situated in the residential section of the city, ample space is provided for play. An auditorium-gymnasium unit, with a fully equipped kitchen, contributes to its popularity as a public meeting place. The first floor plan is shown below. Raymond A. Freeburg, Jamestown, was the architect.





The traditional and the modern are effectively combined in the auditorium-gymnasium stage. The signs of the zodiac appear in the circles above the exits.



— SECOND FLOOR PLAN —

On a center line of the entrance tower at first floor level are the main entrance vestibule, the foyer and the stair hall. On the right of the foyer is the medical center, furnished with a waiting room, dressing room, toilet and general equipment for physical examinations. At the left is the principal's office.

On the first floor is the kindergarten room, a unit 34 feet by 58 feet 8 inches. This room has two bays, in one of which is a stage. A spacious fireplace with an electric log adds much to the homelike atmosphere. Cupboards and lockers are provided in abundance as well as wardrobes, a washroom and a toilet.

From the first day kindergarten children are taught to go to the stage and address their fellow pupils. By starting at this early age public speaking soon becomes a perfectly natural thing and much of the diffidence and self-consciousness that often appear at a later age is forestalled.

In one corner near the stage is a spinet piano, chosen to harmonize with the furnishings of the room. Above the fireplace in an illuminated niche is a copy of a Raphael Madonna in color. The room is provided with venetian blinds so that the light from the banks of windows can be properly regulated.

Equipment includes a generous number of small tables, chairs and playthings, all calculated to make the child's initial entrance into the school as happy as possible.

Back of the planning of this room has been a fundamental belief that if a child is surrounded by beauty several hours of the day its influence will be reflected in his personality, just as bleak and ugly environment will create a starved and warped nature. Thus the Fletcher kindergarten is an experiment to prove the influence of beauty.

Further to develop the child's social instincts a story telling hour is a part of each day's program. This



usually is held in front of the fireplace, which is always lighted on dark days. This also is a favorite setting for games.

A combination auditorium-gymnasium, capable of seating 550 persons, is provided on the first floor. The stage of the auditorium is spacious, being $43\frac{1}{2}$ by 20 feet. It is equipped for dramatics and for assembly purposes. The auditorium-gymnasium is the center of community activities and meets a long-felt need in that section of the city.

At the south of the auditorium and opening into it is a large, fully-equipped community kitchen, with the necessary storerooms located off the main corridor and convenient to the principal's office.

The second floor contains twelve classrooms and a teachers' room. Both floors are provided with toilets, drinking fountains and the rooms for janitor's supplies and maintenance equipment.

In the basement are locker rooms and shower rooms, also a large boiler room and coal room. The latter two rooms are built clear of the building.

Floor construction throughout is fireproof steel joist and concrete floor slab, and the finished floors of all classrooms are maple. This is true also of auditorium-gymnasium and stage floors. The finished floors of

A fireplace with bookcases alongside, plenty of chairs and tables, colorful pictures—these are the homelike touches that distinguish this kindergarten.

the boys' and girls' toilets are terrazzo and the wainscoting is glazed terra cotta block. In the corridors the finished floors are asphalt tile. Sand finished plaster is used through-

out. The window sash are all of heavy cold rolled steel.

The building is equipped with a vacuum vapor heating system with temperature control and steel boilers.

For Better Janitors

WHEN the school of education, University of Pennsylvania, made a survey of the schools of Bethlehem, Pa., it pointed out some flaws in the organization of the janitorial personnel.

Chief among these were (1) that janitors were appointed upon recommendation of the engineer of building and grounds; (2) that the merit system was not employed in selecting the best applications; (3) that members of the janitorial staff, on the average, were too old, and (4) that there was no adequate salary schedule.

The survey went on to suggest six recommendations for improving janitorial personnel:

1. That janitors be appointed upon recommendation of the superintendent of schools.

2. That a merit system be employed.

3. That the maximum age at which an individual may enter the service be lowered from 59 to 44.

4. That in-service training be provided for the janitors.

5. That standards controlling assignment and load of the janitors be established.

6. That a salary schedule be adopted and adhered to.

The disability-leave policy of the Bethlehem board of education gives janitors a maximum of ten days' full pay for disability leave during the school year. Although it was pointed out in the survey that such a policy considered "the interests of both the school employe and the public," the report suggested that steps be taken to guard against chiselers.



Yea Team!

IN thousands of schools, from the Atlantic to the Pacific, you hear the "Yea Team" yell from the throats of enthusiastic youngsters. It's their method of lending support to their school—the most important thing in their lives. The best is none too good for these future captains of industry. That's why millions of dollars are invested annually in our school system . . . that's why many of the world's finest buildings are schools . . . and that is why it is so important that you have proper heating and ventilating in your own school. More than 61,033 schoolrooms in the United States and Canada are now equipped with Nesbitt Heating and Ventilating Units. Additional thousands of these units are being installed each month. The record of Nesbitt speaks for itself—but, we'd like the opportunity to discuss with you, your architect or consulting engineer, the advantages of applying these heating and ventilating units in your school. Why not 'phone us NOW!

AMERICAN BLOWER

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6000 Russell St., Detroit, Mich. Canadian Sirocco Co., Ltd., Windsor, Ont.



The George Washington Junior High School, Long Beach, California, is just as modern as it looks and is equipped with Nesbitt Heating and Ventilating Units. W. Horace Auston, Architect—Hickman Brothers, Contractors—Homer Fisher, Consulting Engineer.

"First Aid" to Furniture

THE Detroit board of education maintains shops equipped for various trades and types of work. These are housed in a building previously used for school purposes. In addition to the usual shops, as carpenter, sheetmetal, plumbing and electric, there are in this building an old gymnasium, which is used for cleaning desks, a room used as a general furniture repair shop and a large room converted into a furniture finishing room. Another small room is used for the sewing of canvas, the repairing of gymnasium mats and the like. A second abandoned school building is used entirely for the storage of furniture.

Procedure under which the repairs and replacements are made follows:

Requests are initiated at the schools by requisitions, which are sent to the requisition department where they are sorted, recorded and referred to the various departments handling the different types of service. In the case of equipment, requests are sent to the building and grounds department where the equipment division determines the disposition to be made of them. In all cases the requests are investigated and instructions noted on the requisition, which is then forwarded to the stock room and repair shops.

When a pickup is involved, a return slip is sent with the requisition. This charges the item from the school to the shop and the requisition charges the item back to the school. The object of this procedure is to keep inventories straight. A proper investigation of requisitions leads many times to adjustments of equipment within a building or district. It also, at times, leads to the determination that proper equipment is not being ordered or may not even be necessary, and in this way serves to keep the purchases of new equipment to a minimum.

Let us consider a typical case. A school sends in a requisition and

From a talk delivered before the regional meeting of the National Association of Public School Business Officials at Battle Creek, Mich.

Detroit's system of repairs and replacements outlined by the head of buildings and grounds department

ERNEST O. FOX

return slip stating that six teachers' chairs are broken. Investigation determines the necessity of repairing or replacing these articles. The type is indicated and the proper instructions are attached to the requisition and return slip, both being sent to the stock room.

The stock room has a truck deliver six chairs of the same type to the school and at the same time pick up the broken chairs. The broken chairs are turned over to the repair shop where they are inspected and either repaired or junked as their condition warrants. The repaired chairs are sent to the finishing room for refinishing and from there to the stock room for future replacements.

In the case of small repairs to desks and auditorium chairs, a different procedure is followed. Such repairs are handled by repair men who are sent to the schools from the shop, as it is often cheaper to send men to the buildings with a few screws, bolts and parts than to go through the procedure of trucking in and out. The same crew removes or installs stationary desks and seats as necessity demands. Repairs to large equipment, such as laboratory tables and machinery, are handled in a similar way by crews of special electricians, plumbers and carpenters.

There are many methods of reconditioning the various types of equipment. All equipment cannot be treated in the same way. For instance, let us consider pupils' desks of the stationary type. These are brought from the schools to the shop

where they are checked for condition, and if the wooden parts—tops, backs and seats—are in fair condition each complete desk is immersed in a tank containing a solution of caustic soda and hot water with a little resin added. This removes all of the old varnish and enamel together with chewing gum and other odds and ends. As soon as desks are removed from the tank they are washed off with cold water and stacked to dry. When dry, they are scraped and sanded, mechanical sanding machines being used on the flat surfaces, and then they go to the finishing room where the wooden parts are stained and varnished and the iron parts enameled. When dry, they go to the stock room.

This dipping process can be used only on equipment having solid wood parts. Veneered plywood and built-up parts will peel and separate. Another objection to veneered parts generally, even when the veneer is heavy, is the fact that deep scars cannot be sanded out without cutting through the veneer. For some reason veneered wood seems to have an attraction for the boy with a jack knife; it is a great temptation to strip or cut into the top or bottom layers. Many of our auditorium seats suffer from this abuse, and the only means of repairing the damage is to replace the mutilated part.

In repairing any piece of furniture, it is necessary to make some estimate of the cost of repairs in order to determine whether or not this cost would be excessive in proportion to the cost of a new piece of equipment. A few examples follow:

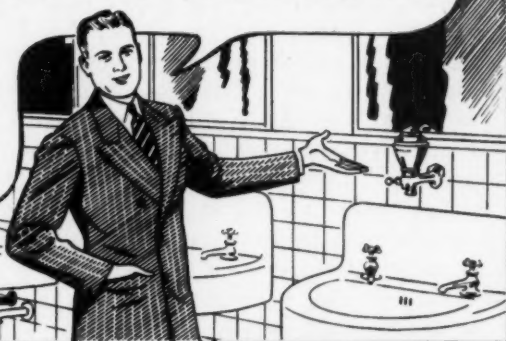
1. Our stationary desks cost approximately \$4.40 each, and fronts and rears cost approximately \$2.90 each. We feel that the cost of repairs and refinishing should not exceed 50 per cent of the cost of replacement. It has been our experience that, under production, we can refinish for approximately \$1 each. It is seldom necessary to purchase parts for the desks as the woods can be taken from those with broken castings.



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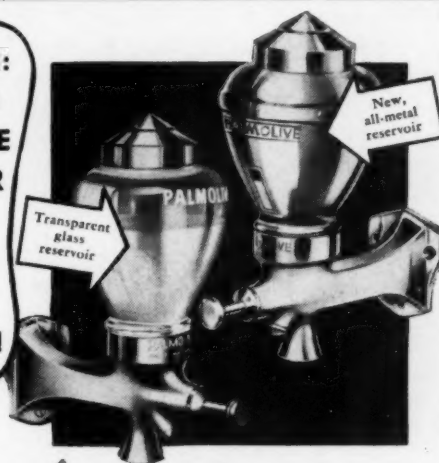
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... SAVES YOU 30%
TO 40% ON
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ECONOMICAL DRY
SOAP SYSTEM**

2. Teachers' chairs made of oak cost \$3.30 each, and the cost of repairs ordinarily does not exceed \$1.25. Teachers' chairs made of bentwood cost \$2.80 each. The bentwood chairs have considerable merit for service in the schools as they can be submitted to hard and rough usage without damage. Dropping an oak chair backward on the floor will split the back posts and split the panels and rails, whereas the bentwood chairs will withstand many such blows without injury. Parts can also be obtained with which to repair the bentwoods at reasonable cost. The part on these chairs that usually has to be replaced is the front leg.

As an example of the abuse they will stand, when the Western High School, Detroit, was destroyed by fire, the lunchroom was equipped with bentwood chairs, and being in the basement, these were submitted to several days' soaking and freezing from water leaking through the building.

The chairs were removed, dried out, cleaned and placed back in service, whereas practically all of the oak chairs of regular chair construction were a total loss because of the joints opening and the seats splitting. While many of the oak chairs are imported, most of our bentwood chairs are purchased from a domestic concern which manufactures a satisfactory product using the American rock elm or white oak.

3. Teachers' tables, 30 by 42 inches, cost \$10.20. These have plywood tops and when the veneer is too badly damaged the top is sanded down and a sheet of hard composition material is glued on. The only other parts that are liable to break are the corner braces, and these can be replaced at little cost. Tables are refinished, the top is given a coat of varnish or lacquer and they are ready for service. It is not even necessary to finish the top as the material forms a hard smooth writing surface as it is. Three tops can be cut from a 4 by 8 sheet, which costs approximately \$1.60. Between \$3.50 and \$5 expended will place a table back in service.

4. Our teachers' desks, 30 by 42 inches, cost \$21.25. The method of repairing and reconditioning these desks is much the same as for teachers' tables, similar tops being applied

when necessary. The parts of these desks most often requiring attention are the drawer bottoms. The resetting and regluing of these are minor jobs. Should the joints of the legs and frames pull apart, which sometimes happens when janitors of the Sampson type pull them across the floors too strenuously, regluing and small iron angle brackets are the remedy.

Naturally, in a system as large as Detroit's, where the purchases are made on bids and the lowest responsible bidder who conforms to the specifications is successful, there is a great variety of makes and, as each manufacturer has a slightly different method of assembly or some slight

difference in dimensions, any salvaged parts must be used for repairs on equipment of the same type and size.

The procedure is much the same for all other types of equipment. When possible, we replace broken equipment in the schools from stock so as not to handicap the schools by loss of equipment while it is being repaired. Also, a more regular procedure can be carried on in the shops. Because recirculation is constant, the space required for storage need not be large. In many cases, the reconditioned material never sees the stock room, as it is shipped directly to the schools from the repair shops.

Centralization and Taxes

CHARLES WELCH

ONE of the questions most frequently asked about centralized or consolidated schools is: Will taxes be higher?

Take the Wolcott school district. It is no more prosperous than any like community in New York State. It is centered about a small town of 2000 population. There are no industries of importance, and the surrounding country is given to dairying and raising fruit.

The assessed valuation of the district is \$2,850,000. Before centralization, I was paying 9 mills school tax on some property I own. This money was being used to support a one-room shack, to pay one teacher and to attempt to educate seven pupils up to the seventh grade. These children had to walk to school through all kinds of weather, coming in cold and wet and huddling around a stove in a building erected without any provision for ventilation except the crude method of opening a door or a window. Colds and illnesses resulted.

These children are now housed in a modern brick building, which is fireproof, air conditioned and temperature controlled. Our building was built with W.P.A. funds and cost \$455,000, exclusive of equipment, which cost \$55,000 or more.

The children who formerly attended the little red shack now step

out of their homes into warm buses which deliver them at the school-house door. We have seven large buses, two carrying fifty-five passengers and the others, forty-four.

Each bus makes four trips daily, two in the morning and two in the afternoon, each trip averaging about 19 miles. These buses are heated and ventilated and correspond in every respect to the finest coaches used by large transportation companies in passenger service. Our cost per pupil mile is about seven-eighths of a cent. Our drivers are selected for sobriety and character. They work about five hours each day and a mechanic is employed full time.

The health of the pupils is supervised by a registered nurse and four physicians who alternate every month. A large cafeteria is run in connection with the school in which milk and balanced meals may be obtained at a nominal cost.

In addition, we have a large auditorium, seating 800 persons, a separate gymnasium completely equipped, a large tennis court, ball diamond and spacious play grounds.

For all these advantages we are now paying 5.6 mills with a further reduction promised next year until we get down to 5 mills, which is as low as we can go and still receive state aid.

IF YOU WANT THEM TO BELIEVE—SHOW THEM

CHILDREN of all ages will believe the evidence of their own eyes when words alone only bring doubting puckers to their foreheads. That's the reason so many schools supplement courses with BALOPTICON projected pictures. Such pictures furnish the proof children, who are natural doubters, demand.

B & L BALOPTICONS have been designed and built to meet the most exacting requirements. Models are available in a wide range of prices to meet every still projection need—for use with lantern slides, films, clippings, photographs or actual specimens. All measure up to the highest optical standards and are built so ruggedly that the permanence of your investment is assured. Write today for Catalog E-II. Bausch & Lomb Optical Co., 689 St. Paul Street, Rochester, N. Y.



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Above, Model KOSB Balopticon for both lantern slide and opaque projection. Designed for use with a translucent screen.

BETTER PLANT PRACTICES

Summer Vacation Plans

How shall we spend our summer?

For those engaged in school maintenance the answer is not found in alluring folders of foreign travel or enticing itineraries to native spots of scenic beauty. Catalogs that clutter the desks of business managers, engineers and custodians these days concern plumbing fixtures, lighting fixtures, paint charts and roofing materials.

The summer program is with us, not in actuality, of course—that will come when classes are dismissed for the last time this season—but in detailed reports of necessary renovations and changes to the school plans, the result of lengthy conferences of department heads and the administrative staff.

But let's see what's going to happen when this so-called vacation season actually arrives.

In Evansville, Ind.

"The summer program of maintenance in the Evansville public schools," this is the voice of Rufus L. Putnam, assistant superintendent in charge of business affairs speaking, "will require the services of the regular maintenance staff, members of the custodial department and W.P.A. labor."

But before Mr. Putnam tells us more, it should be explained that it is the plan to rehabilitate completely the seventeen elementary schools and four high schools, having a total enrollment of approximately 16,000 children, with a crew of 200 men.

Now if you will continue, please, Mr. Putnam.

"All work will be handled under the direction of Clarence R. Applegate, director of buildings and grounds. The men will be divided into groups according to their ability to do certain types of work. There will be three groups of carpenters that will work at specific jobs, such as retreading stairways, replacing worn out floors in classrooms and corridors, repairing window sash and frames and making minor alterations. There will be a group that will resurface slate blackboards where such work is needed. There will be four groups of painters assigned to exterior and interior painting of buildings. A group will be available to keep lawns, shrubs and plants in condition during the summer. Skilled mechanics will be available to make

minor repairs in plumbing, heating, electrical wiring, masonry and roofing. A group of custodians has been trained to sand and refinish desks and table tops in buildings where this work is needed.

"Since the school playgrounds will be used as recreation centers during the summer, one custodian will be at each school building during the day. He will be required to make minor repairs in the building.

"On August 15 all custodians, assistant custodians, engineers, firemen and matrons will be reassigned to their particular school to begin general housecleaning of all the schools prior to the opening, September 12. The school buildings will be completely renovated."

Salina, Kan., Next!

Salina, Kan., is the next stop! The Salina school system comprises thirteen buildings having a school enrollment of nearly 5000. Here we find F. L. Reynolds, clerk and purchasing agent of the Salina public schools, just finishing a conference with the building principal and some of the teachers. Mr. Reynolds should be introduced as the man who is held responsible by and to the board of education for costs and for the satisfactory completion of all repair and maintenance work approved by the board.

Now we'll let him talk for himself:

"All repairs, remodeling, renovation and building changes to be considered for the coming summer are noted during the regular winter term of school. As soon after April 1 as possible the clerk holds a personal conference with the building principal and any teachers directly interested in the building changes or remodeling that have been proposed. If, after such conference, the proposed remodeling or repairs seem advisable, then brief plans and specifications and itemized cost sheets are made covering the job. This procedure is followed covering all proposed summer repair jobs in all buildings.

"These plans and estimates are compiled and laid before the buildings and grounds committee of the board of education. As soon thereafter as possible the buildings and grounds committee looks over the proposed repair or remodeling recommendations made by the clerk. Then at the June 1 meeting of the board, the committee recom-

mends to the board any or all of the proposed repair program it feels should be done during the summer. The board then approves all or such part of the recommended repair schedule as it deems advisable.

"This approved repair schedule becomes the basis for the summer repair budget and the guide for the work that is to be done during the summer. Plans are made and materials ordered accordingly. We are fortunate in having in our building custodian personnel men who formerly were skilled mechanics in their respective trades: carpenters, painters and sheet metal workers. With this type of custodian we do practically all of our own summer repair work.

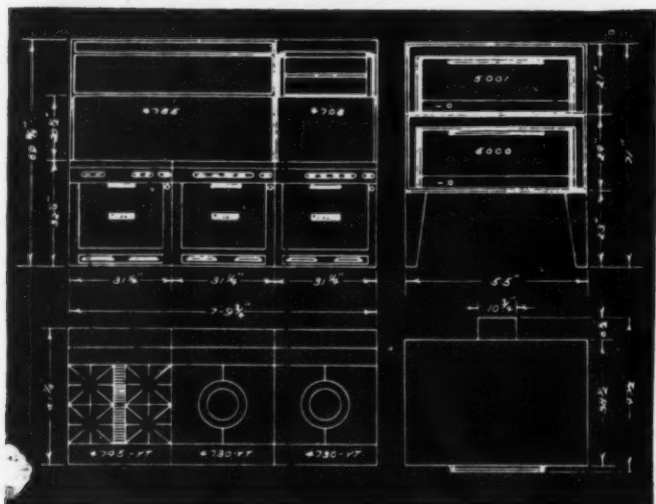
If, however, the repair schedule is too large for the size of our force of men, we supplement our crew with two or three of our high school shop teachers who are willing to work for us during the summer vacation period. These men usually do cabinet and millwork, using the school shops and equipment for turning out this part of the work. We also have a full-time maintenance mechanic who takes care of all current plumbing, heating and other ordinary mechanical repairs as occasion arises. This naturally reduces to a considerable extent the number of small repairs to be made during the summer vacation.

"We give out on contract large decorating jobs, building additions, concrete work, new plumbing and heating installations requiring the use of extensive construction equipment, but all other repair and maintenance work is done by our own force of custodians.

"It has been our plan for the last few years completely to rejuvenate one of our older buildings each summer. This includes replacing old ceiling plaster with some type of approved acoustical material; sanding and refinishing all floors; redecorating the building throughout; repainting all outside trim and woodwork; providing new lighting fixtures and outlets and new door hardware; building and installing supply cabinets, bulletin boards, display cases and book and magazine racks; repairing the roof if necessary; modernizing the plumbing and heating equipment if necessary, and either repairing and replacing or buying and installing new seating equipment.

"We carried out just such a program last summer and, in addition, with the aid of a competent foreman and some common labor from outside our own force built a wood stadium seating 1200 pupils for the use of the high school athletic association."

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The plan will help you to uncover a number of ways to get maximum efficiency and maximum savings from your modernization program.

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If you desire, our representative will gladly discuss your equipment requirements with school officials and architects and suggest solutions.

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Economy-Facts About

VULCAN **GAS COOKING EQUIPMENT**

Cuts fuel costs 25% to 50%. Due to the close margin on which a school cafeteria operates, costs are important. By replacing obsolete equipment, hundreds of cafeterias have reduced cooking costs 25% to 50%, savings which soon paid for the new equipment.

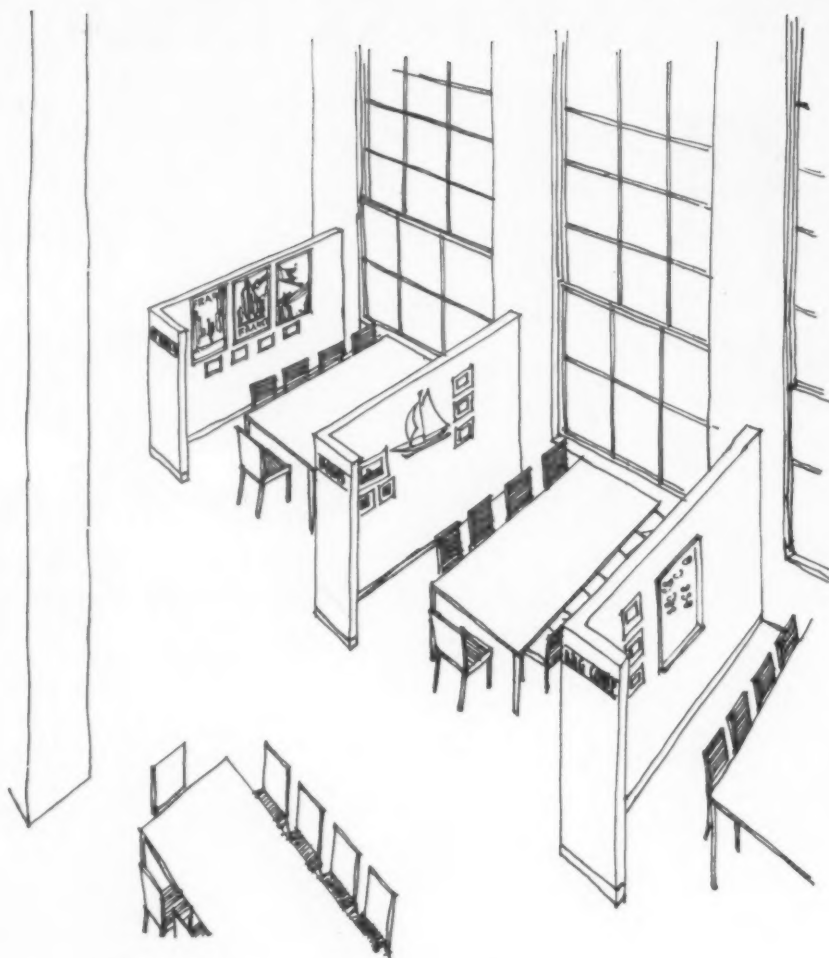
Reduces Meat Shrinkage up to 66%. By using automatically controlled low temperature roasting, more servings per roast can be obtained.

Ask for Booklet "Cutting Cooking Costs"

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Sketched at the left is the author's suggestion for breaking up a large school cafeteria. Light portable screen walls separating the tables form quiet areas for conversation and leisurely eating.

Alcoves for Eating

DOROTHY E. von STERNBERG

ALL teachers and most parents will agree that few modern schools teach children how to eat. This is not meant as a criticism of table manners or diets. It is aimed directly at those two important accessories of enjoyable and healthful eating: surroundings and conversation.

A dietitian, especially, lives to watch other people eat. Admittedly it is difficult for adults to change their manner of eating, but children, not yet exposed to the habit-grooving of maturity, may still be taught to eat in a less automatic way.

The general conception of school lunchrooms today is borrowed more

from business than the home, with the result that meals are served in noisy, huge, uninteresting halls that naturally handicap spontaneous, leisurely conversation. Going still further, the reverberated noise not only discourages conversation during the meal, but its intensity is inclined to stimulate the child to eat faster and talk louder.

In the normal child this encourages the habit of bolting his midday food, with consequent bad effect upon his digestion and, as a result which every dietitian can understand, upon his studies as well. Even more serious, maybe, are the depressing effect that eating in these sur-

roundings may have upon the sensitive child and the nervous strain to which it puts the child who is highly strung and comes to his meal already keyed up and tense from classroom studies and recitations.

Proper eating requires an intent functioning of the palate, the eye and the mind, an important aid to good digestion that is lacking in hurried eating. The culture of a people, too, courses in the breath of its conversation. Prime it with good food, pleasant surroundings and ample time, and the brain, as well as the blood, will be nourished. So to the school lunch!

Let us begin with the child. He may be a boy of 10 years, interested in sailboats and catfights, or he may be 14 and taking his first lessons in French and Shakespeare. We have here fertile ground for conversation. Let us show him the pleasures that come with good eating in quiet, intimate surroundings.

A large, bare lunchroom needs only to be broken up into smaller units to become more interesting and in better scale. By erecting a series of light screen walls along one side, separating the tables, we will not only reduce the noise of the room, but provide incubators of pupil interest and happier eating manners. These need not be expensively built; in fact, the boys' manual training classes can construct them easily.

They consist of an interior bracing of wood studs, spaced 2 feet on centers, covered with a fibrous panel. A sound-absorptive panel will tend to swallow the sound waves impinging on it rather than to reflect and intensify them. The material selected should be such, too, that pictures, charts and announcements may be affixed to it without marring the surface.

To increase the screen wall's stability, a short wing may be attached



Four Months Away..but

Seating Requirements Should Be Planned NOW!

The Fall term, with the vacation months intervening, seems a long time away; but it will roll around before you realize it. Now is the time to plan for the seating that will be needed in September.

So don't delay. Write for a copy of the new IRWIN catalog, at once, if you do not have one. It describes the finest, most comprehensive line in our 35 year history of quality seating manufacture—ideal seating for every classroom and auditorium requirement. Selection from this great line and early placement of orders, while stocks are complete, will insure having the most advantageous equipment when you want it. IRWIN prices reflect the economies of large scale modern operation. Write, today, for catalog.

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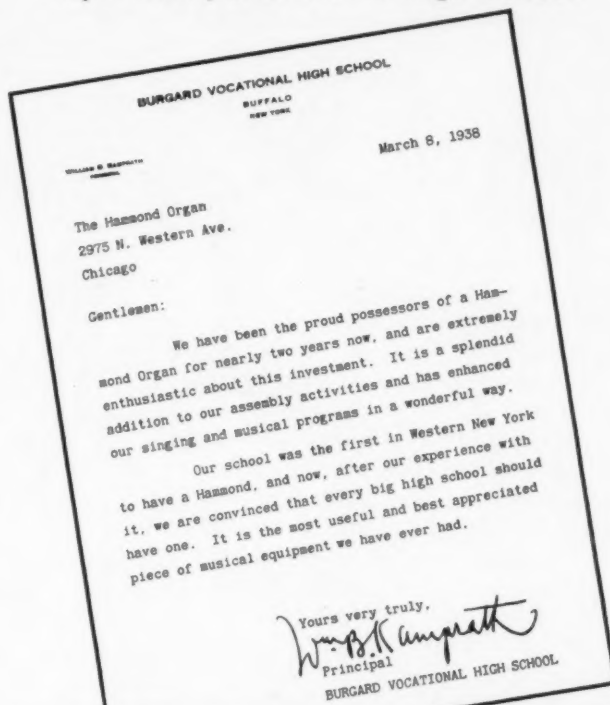
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BESIDES enriching the entire musical background of your school, a Hammond will bring pleasure to your whole community. Adult gatherings are attended with livelier interest when the school equipment includes a Hammond . . . the "orchestra in a four-foot square". The Hammond can be installed wherever there is an electric outlet; can be easily moved from one room to another; and costs only \$1250 and up, f.o.b. Chicago. (Price depends on size of auditorium and equipment selected.) Hear the Hammond at your nearest dealer's, or send the coupon below.

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Gentlemen: Please send me complete information on the Hammond Organ, including the list of school and college users.

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at the front end. This will permit attaching club names to the alcoves. The size and the spacing of the screens should not be excessive as they might then interfere with ventilation. The room end, too, should be left open to permit easier supervision. A height of 6 feet will lift them above voice level, yet leave the upper part of the room unobstructed.

The screens may be made portable. This permits their use to cut off parts of the room for special uses, such as class dinners or faculty luncheons. It is well in the beginning to restrict their use to the lunchroom, for other departments will find many other ready uses for them.

The alcoves also may be used as clubrooms. Eager youngsters should be encouraged to band together and to apply to the student council for club charters. This charter will permit the group to claim an alcove for its own special use, and a supervising committee of club representatives will prepare and maintain rules of order for all groups. And the names of each club: The Sail Boaters, the Botany Club and La Famille Francaise may be nailed with brads to the front wall. The supervising committee may consult the art instructor for decorating advice and the manual training instructor for construction details and technic.

The alcoves may be painted, but avoid "schoolroom buff" at all costs. These are, after all, clubrooms and should reflect the personalities of their members. Nor should there be any hesitancy about using different colors in the different rooms, provided they harmonize. Since this may be a group responsibility, why not leave the painting to the individual clubs? The supervising committee may prepare a palette of permissible colors and require that a washable flat oil paint be used; it has a soft, color-rich finish that is easily cleaned.

An unobtrusive control over the club and its activities must be maintained. This can be accomplished by encouraging visiting between the clubs, by group contests and by means of faculty advisers for each group. The visiting will prevent the members from becoming too smug and narrow in their conversations and interests, and the group contests

will stimulate them to devote a certain portion of their time to a co-operative enterprise. Exhibitions of the groups' work, such as photographs, artwork, models, hobbies, needlework and writing may be arranged periodically on afternoons after classes. The affairs should be attended with dignity and importance. The faculty should be present and a spokesman for each group should give a short description of its activities. This should be followed by a judging and, naturally, cakes and cocoa. It will develop a fine spirit between the faculty and pupils and be reflected in the classroom.

Briefly summarized, the art of conversation flourishes with the gentle

art of eating. Both activities are regulated by delicate mechanisms that make the finest man-made instrument awkward in comparison. These sensitive controls, however, are easily disrupted by noise. Experiments with physical reactions to noise impulses have shown that digestion and thinking are retarded by excessive noise, making noise an important contributor to indigestion and to intellectual sluggishness. Dietitians always have realized this, but to a considerable extent have felt unable to correct existing conditions. The inexpensive corrective may well appeal to them as an aid to effecting that ideal of sound minds in sound bodies offered by "eating alcoves."

FOOD FOR THOUGHT

Golden Brown Cornsticks

• Everyone who visits the Raleigh school cafeterias, Raleigh, N. C., comes away talking about Frances Moore's cornsticks. But before Miss Moore gives us her recipe for this delicious hot bread, suppose we look around a bit at her attractive food counter. The menu comprises at least one kind of soup, meat, green or leafy vegetable, starchy vegetable, two kinds of sandwiches, choice of salads, a wholesome simple dessert, orange juice, milk and brick ice cream.

All single servings of food are 5 cents, but Miss Moore specializes also in a 10-cent plate lunch. She does this, she will tell you, to encourage the use of hot foods and to cultivate a taste for a variety of foods. This plate lunch consists of a serving of meat and a small serving of each of the two vegetables on the menu. Now for the cornsticks: "We always give," she says, "a cornstick with this plate, and one with each serving of vegetables, other than starchy ones, and meat."

All ready with your notebooks now, while Miss Moore lets us in on her secret of making these cornsticks. First it should be explained that they are 3 inches in length and are baked in cast iron cornstick pans which are divided into 24 sections. They are always golden brown and are kept as hot as possible.

Ingredients and the proportions used are as follows: 3 quarts meal, 4 tablespoons baking powder, 1½ cups melted fat, 2 tablespoons salt, 2 quarts milk,

4 eggs. Sift meal once, then sift with baking powder and salt. Add milk and ½ cup melted fat, then eggs slightly beaten. Heat cornstick pans and use remainder of fat in them. Add well mixed batter and cook in hot oven (500° F.) until well browned.

Food Conference at Rochester

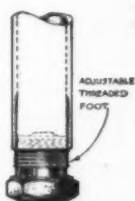
• Rochester, N. Y., has been selected for the fourth Annual Conference of Food Service Directors, the dates designated being November 4 and 5. These conferences held in various sections have proved helpful in establishing standards and offering an opportunity for the discussion of common problems.

Public and private schools have favored the operation of their food service units by trained women in order to provide educational opportunities as well as correct nutrition, and it is the educational aspect of school feeding that has been stressed in these conferences. The possibilities of promoting a better standard of health through cooperation with the food service directors, the parent-teacher associations and the school faculty have been brought to the attention of superintendents and principals.

The general chairman of the Food Directors Conference is Grace Helene Miller, board of education, New York City. Constance Hart, board of education, Rochester, N. Y., is chairman of the local committee on arrangements. Laura Comstock, Eastman Kodak Company, is chairman of the program committee.

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After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935) **MERCUROCHROME, H. W. & D.**
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Chefs in the Making

HELEN McILHENEY O'BRIEN



Baking is the favorite form of cookery for these members of the Boy Chefs Club. Observe the care taken in measuring ingredients.



Like good housekeepers the boys wash used utensils as they go along and keep the kitchen neat. They also learn to plan menus.



in the mechanical devices used in the modern cafeterias and restaurants, such as the electric mixer, vegetable peeler and dish washer. The dietitian has said, "It is the Chefs Club boys who feel free to ask questions about the foods as they select their lunch when passing through the line." The Chefs Club boys have earned the reputation of being "stand-out" boys in the cafeteria, because of their unusual interest in food selection, recipes used in the cafeteria menus and for their effort to help keep the dining room clean.

When this club was organized, a drive was made for members, which was announced in the school's daily bulletin. No advertising was needed this year for the old members presented themselves for enrollment during the first week of school. Each boy seemed to have a "buddy" with him, and long before the regular club activities had been started at Patterson, there were thirty-one boys on roll for the Boy Chefs Club.

The class meets once each week, and the dues are five cents, which pay for the materials needed in the lesson. Many times members of the class do the marketing, for we are anxious to train the boys to become intelligent and thrifty consumers.

A checkup was made on last year's work after the class was reorganized to see if the knowledge gained in the club period at school had been put into practical application at home during the vacation. The result of the check showed that every boy had cooked at home and helped with the meals. Baking seemed to be the favorite method of cooking, and muffins, Dutch apple cake, cookies and plain cake the foods favored.

Good bread makers are anticipated before very long, as the club members have requested lessons in the much neglected art of making yeast bread in the home kitchen. Each week when it is at all possible, the boys carry home to mother a sample of the food prepared that day.

ALL extracurricular activities in the Baltimore junior and senior high schools are elective and are scheduled during the school day, not after school hours. One of the most popular of these is the Boy Chefs Club in the Patterson Park Junior-Senior High School.

In this particular club big boys and little boys of varying nationalities are enrolled, all bent on delving into the mysteries of the art of cookery. The program includes the study of foods and cookery, meal planning, table service and table and social etiquette. The lesson may include some discussion, but all lessons allow a major amount of time for practical work. The boys bake and steam and roast and fry and have an enjoyable time in the doing. They are apt pupils in table manners and social form and their greatest delight is to "show off" by serving tea to the

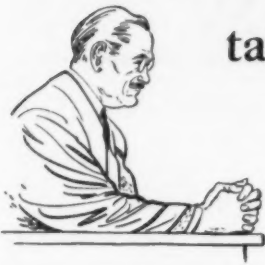
faculty or to be assigned to some duty in the school cafeteria.

They enjoy the field trips to the large bakery in the neighborhood, the meat packing industry, the dairy and to a famous restaurant in the city where they are guests of the head chef who takes great pride in showing the class through every department of his culinary domain.

The trip to the school cafeteria early in the school year is of great interest to the group. The dietitian describes every detail of the inside workings of her modern and perfectly organized kitchen. There they see the cooks and counter women at their various duties preparing the noonday luncheon.

Their enthusiasm brings forth many intelligent and interesting questions about marketing, menu planning, food costs and food preparation. They are keenly interested

"COURT REPORTER, take the stand!"



Q. "You are specially qualified to testify about typewriters, are you not?"

A. "Yes, sir. Day in and day out, Court Reporters probably drive their typewriters faster and longer than any other class of users."

Q. What qualities do you require in your typewriter?

A. First, **SPEED** -- to get the day's testimony transcribed in time.

Second, **EASY ACTION** -- to lighten the load of a long day's typing.

Third, **DEPENDABILITY** -- because we can't afford breakdowns.

Fourth, **LOW UPKEEP** -- because it comes out of our own pockets.

Q. You pick out whatever typewriter you want, for yourself?

A. Yes -- and pay for it ourselves, too. You see, we're paid by piece work, so our machines have got to produce at the lowest cost.

Q. Is there one make of typewriter preferred by Court Reporters over all others?

A. Yes...very clearly. More L C Smith typewriters are used by Court Reporters than all other makes combined! And Court Reporters use nearly three times as many L C Smiths as any other one make!*

Q. Is this marked preference of yours for L C Smiths of any significance to business generally?

A. I should think it ought to be. When hard users like Court Reporters have independently chosen this one machine, in many different cities -- and on no other basis than results -- I should think lots of business houses could take the tip. We've done their testing for them!

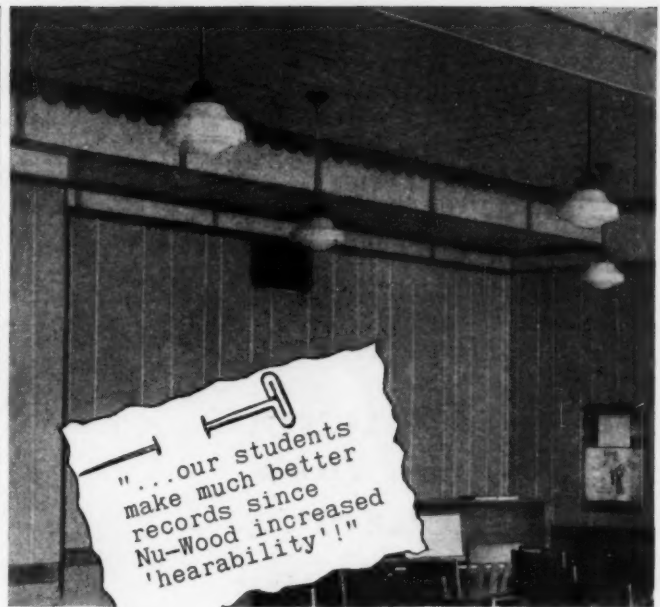
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NEWS IN REVIEW

Short Wave in Montana

Recommendation that every county in Montana investigate the feasibility of owning and operating a short wave radio station for educational purposes has been adopted by the 1938 delegate assembly of the Montana Education Association.

A special committee headed by Boyd F. Baldwin of Terry, Mont., has pointed out in the recommendation that the stations can be made available to the entire county government for legitimate civic interests in addition to their use in coordinating the work of the schools.

The committee also pointed out that: (1) the stations can be heard on ordinary all-wave receivers, (2) they will cover a radius of from 18 to 40 miles and (3) the stations can be installed for \$1000 to \$10,000.

Since a survey made in March showed more than 90 per cent of the district schools in Montana reporting a desire for regular daily classroom broadcasts with emphasis on news and music, it also was recommended that the Montana Education Association urge the state department of public instruction to begin broadcasts for schools over all Montana stations by September.

A third recommendation would encourage county superintendents and district school boards to budget in 1938 for radio equipment. Good programs on the air for schools is the sure way to encourage equipment purchase, it was pointed out.

ADMINISTRATION

Class Size Has Fallen

Estimated class size in the New York elementary education division for the spring term has been placed at 34.8, according to Rufus A. Vance, assistant superintendent of schools. This is the first time since the consolidation of the New York system forty years ago that the average has fallen below thirty-five. Doctor Vance said that the average size of classes in the regular grades twenty-one years ago was forty-one. This drop, he said, has been caused largely by the falling birth rate in that city. Seventy schools with an enrollment of 90,000 children had an average class size of 33, compared to 34.1 a year ago. These schools are to be found in the sections of the city in which the economic status is low and the percentage of retardation high. By reducing the size

of classes, the children who need it get more individual attention.

What's Wrong in Kansas?

Complications in the certification laws, too many small high schools and political instead of educational considerations in some quarters are factors limiting the efficiency of Kansas schools, according to Aaron J. Regier, who has just published a study in the University of Kansas bulletin of education. Doctor Regier points out that teacher certification laws of Kansas are of a slow growth, full of contradictions and uncertainties; that Kansas is one of eight states that permit teacher-training courses in high schools and certificate these high school graduates.

Absence Affects Salary Increments

A policy with reference to the salary increment of teachers who have been absent for extended periods has been approved by the New York board of superintendents. It provides that no teacher shall receive a salary increment if during one year he has been absent seventy-five days or more. A teacher who has been absent forty days or more but less than seventy-five days may receive an increment if he satisfactorily explains his absence. An absence of twenty-five days or more also must be explained.

Democratic Administration

Indiana State Teachers College, Terre Haute, Ind., has launched an experiment in administrative policy with the appointment of thirty-six top ranking students to nine faculty committees.

The committees heretofore have been reserved exclusively for faculty membership, but now will have four students each on their membership. They are the groups charged with controlling activities closely related to student affairs.

President Ralph N. Tirey expressed high hopes for the plan as a means of giving the students a democratic opportunity to voice their views on administrative policy.

Dust Bowl Migration

Large increases in the school population of certain Oregon counties during the last four years are thought to be a result of the dust bowl migration and the opening of the Federal Reclamation Project in that area. Malheur

County in eastern Oregon during this period has had an increase in school population of 54.12 per cent, while Klamath County in southern Oregon has shown an increase of 27.36 per cent. Several other counties in the Willamette Valley have shown increases from 10 to 16 per cent. This large increase in the case of Malheur County has produced an acute problem in the matter of housing and operating expenses.

FINANCE

Charge Discrimination

A mandamus suit asking that the salary level of Negro teachers be placed on a par with that of teachers and principals in white schools has been filed against the Prince Georges County board of education in Maryland. The bill of complaint alleged that the salary schedule, which provides higher pay for white teachers, was a violation of the constitution of Maryland and also of the 14th Amendment to the U. S. constitution.

Salaries in white schools of the county average between \$300 and \$350 a year higher than those paid in Negro schools. The cost of raising salaries of Negro teachers to equal those in the other schools has been roughly estimated at \$43,000. It would necessitate an increase of 8 cents on each \$100 of assessed property evaluation.

The school board was given until April 25 to show cause why the petition for the writ should not be issued.

Salaries Restored in Part

The Trenton, N. J., city board of school estimate has appropriated an additional \$214,750 to the board of education for payment of a 10 per cent salary restoration and one year's increase during the fiscal year beginning July 1. Recently the state education commissioner ruled that the school personnel of Trenton is entitled to full pay as of July 1 last year. School employees have since been paid 85 per cent of their full pay rates, in common with other municipal employees. In absence of permissive state legislation, it is believed that the board of education will carry its appeal to the New Jersey supreme court.

Three Universities Benefit

Besides receiving outright bequests, Harvard University and the University of Pennsylvania each will receive 40 per cent of the residuary estate of the late Arthur S. Lea, formerly a member of the publishing firm of Lea and Febiger, Philadelphia, who died in

"And this, Mrs. Smith, is one of our washrooms"



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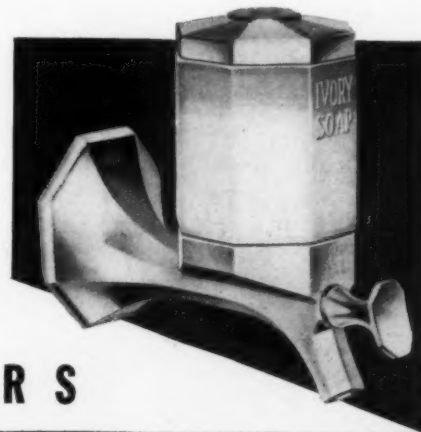
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**IVORY SOAP
DISPENSERS**

January. No estimate of the probable amount was available. Princeton University will receive \$150,000 in trust for the establishment of a professorship in history. A gift of \$52,500 to the University of Pennsylvania provides for printing and publishing the works of the testator's father, Henry Charles Lea, the historian. The university museum also will receive \$10,000 for general use.

For Colonial Restoration

A \$100,000 gift toward the restoration of University Hall at Brown Uni-

versity, the original "college edifice" of 1770, was announced recently by President Henry M. Wriston on the eve of the first anniversary of his installation as the eleventh head of Brown. The gift is from an anonymous donor. The restoration plans call for rebuilding the interior of the structure, erected 168 years ago.

Brown's University Hall is one of the few college buildings of pre-Revolutionary days which still survives, and is recognized as one of the country's outstanding examples of the Colonial type of college architecture.



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PERSONNEL

Low Achievement

Senior college students intending to teach averaged below the general average and below the average of nearly every other vocational class, it was revealed in a report recently released by the Carnegie Foundation for the Advancement of Teaching in a bulletin entitled "The Student and His Knowledge." Many of them had lower scores than high school seniors four years below them. The report proposes that systematic tests be applied to make sure that teachers have as good an education as that already possessed by the pupils they expect to teach.

Longevity Creates Problem

Teacher longevity in the New York school system has created a problem for the Teachers Retirement Board and the tables upon which pension fund contributions are based may now have to be revised. Teachers in general not only live longer than expected, but women teachers outlive the men. The mortality tables were prepared in 1917. Dr. Emil Altman, chief medical examiner of the board of education, held that the removal of the "strain and responsibility" connected with teaching had reacted favorably from the health point of view. "Teachers who retire have a steady income and have not the responsibilities that go with teaching," he said.

INSTRUCTION

Child Traffic Deaths Decrease

That safety education in the schools actually educates children and saves lives is shown in an analysis of traffic accident records released by the U. S. Department of Agriculture. From 1926 to 1935 child deaths in traffic decreased 18 per cent while deaths of adults increased 91 per cent. The greatest gains have been with grammar school children, the bureau of public roads finds.

No Thesis for Master's Degree

Education students at the University of Chicago can now earn the master's degree without writing a thesis. Abolition of this traditional requirement emphasizes the breadth of training a student may acquire in his course work rather than the degree of specialization to which his efforts must be directed. The alternative plan for obtaining a master's degree substitutes for the thesis an acceptable paper or report

showing ability to select, integrate and evaluate data with respect to some educational problem or procedure.

Summer Experiment

Reed College, Portland, Ore., is experimenting with a summer session in which students devote two weeks to one current problem. Three institutes are planned: one on education, to be led by Dr. T. V. Smith, professor of philosophy at the University of Chicago; one on Northwest affairs, to be led by labor representatives of the A.F. of L. and C.I.O., and by utility officials of federal and state governments and of power companies, and one on international relations, to be led by T. Z. Koo, a representative of Japan, and J. Anton De Haas of Harvard University.

Curriculum Committee

A curriculum construction committee has been organized at the State Teachers College, California, Pa., in cooperation with a statewide enterprise planned by the elementary education division of the Pennsylvania Department of Public Instruction. This committee will improve and influence the curriculums of elementary schools of its own region and will share its experiences with other schools.

New Teacher Training Division

A division of teacher training has been established in the college of arts and sciences at the University of North Carolina, under the chairmanship of the head of the department of education, to unify the efforts of the various departments concerned with teacher training and to guide students in planning their programs. The significant element in the plan is that it brings the entire university faculty into direct relationship to the work of teacher training.

Preparation for Professions

Since practically every profession today requires secondary school graduation, or its equivalent, as a basis for admission to professional schools, the Pennsylvania Department of Public Instruction gives semiannual pre-professional examinations in seventy-two cities of the commonwealth. Recently 715 candidates availed themselves of the opportunity to qualify for admission to professional schools by taking the examination.

The ages of the 715 candidates ranged from eighteen to fifty-seven years. The greatest number, by decades, were between twenty and thirty years of age, and the next greatest number were from thirty to forty years.

Occupations of the candidates ranged from housework to technicians. The

greatest number, 167, were students; eighty-five were nurses; seventy-three, teachers; sixty-four, laborers; fifty-eight, clerks; eighteen, accountants; eighteen, undertakers; thirteen, stenographers; nine, salesmen; eight, houseworkers; seven, technicians, and six, ministers. Other occupations were represented in smaller numbers.

Many of the candidates were seeking higher preparation in their present fields, while others were seeking new

professions. Preparation for teaching was the favored profession, with 211 candidates. The next greatest number, 133, chose nursing as a profession.

These persons, by submitting their credentials and receiving definite directions from the department, complete their secondary school work through these examinations in a comparatively short time. Having thus completed their pre-professional preparation, they are eligible to enter higher institutions.

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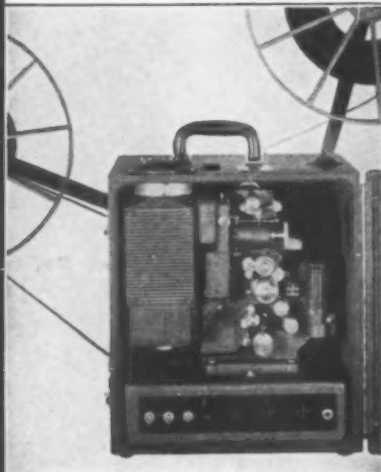
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N. H. Writers' Conference

A writers' conference will be a part of the University of New Hampshire's summer program, August 1 to 11, at Durham, N. H. Writing and marketing manuscripts will be discussed in small "workshop" groups, at round tables and in individual conference; these will be supplemented by public lectures. The conference staff will include Gladys Hasty Carroll and Robert Tristram Coffin, representing the old and the new schools of New England literature, and William Harris, former staff member of the *Writer* at Baker's famous workshop at Harvard, who will give attention to problems of sale and publication.

BUILDINGS

Dedication Day at Lewistown

It was an occasion when the board of education at Lewistown, Pa., dedicated three new school building projects on the same day. On March 22 exercises were held observing completion of an elementary school building, a senior high school vocational department building and the modernization and addition to the senior high school building.

Pupils Rescued

In the devastating tornadoes that lashed across five Midwestern states during the latter part of March, the Highland Grade School building at Columbus, Kan., housing more than 100 pupils, was wrecked. The pupils were rescued without fatalities, despite the collapse of the roof.

Strikes at Night

The three-teacher brick school at Mankins in the Panhandle of Texas was almost a total loss as the result of a twister that struck recently between 1 and 3 o'clock in the morning. Parents of the community forgot their financial loss in joy at the fact that the tornado came at an hour when no children were in the schoolhouse.

Architectural Competition

Goucher College has announced an architectural competition for a plan to develop a 421-acre tract near Towson, 10 miles north of Baltimore, for use as a liberal arts college for women with an approximate enrollment of 1000 students.

The program for the competition will be issued about May 20 and submissions by the architects will be due September 12.

The college will make awards for

designs placed as follows: first, \$2500; second, \$2000; third, \$1500, and fourth, \$1000. The author of the design awarded first prize will receive commissions to develop his design into a completed general development plan in consultation with the college and to design and supervise the construction of one principal building.

Large Book Collection

A new addition, which will accommodate 8,000 volumes, has been made to the Indiana State Teachers College library at Terre Haute, Ind. Already containing approximately 130,000 volumes, the library is one of the largest teachers' college book collections in the United States.

Million-Dollar Bequest

A million-dollar bequest to George Washington University, Washington, D. C., for construction of an auditorium has been given by the late Abraham Lisner, millionaire retired merchant and philanthropist, through a provision in his will.

Junior College Occupies City Block

A new junior college, including the last two years of senior high school, will be opened in September, 1939, at Pratt, Kan., in a new \$290,000 building now under construction. It will be three stories, with a two-story wing on each end. An entire city block adjoining the high school athletic field was purchased as the site.

RESEARCH

Problem Children

Problem children are the result of slow growth of the whole personality, not of isolated sensory or learning retardment, it has been concluded by Dr. Willard C. Olson, director of research in child development at the University of Michigan, after conducting a series of tests year after year on the same children. Doctor Olson prefers this method to measuring different children at different ages to discover growth tendencies.

Youth Sample

The most pressing problem of America's younger generation is economic security. Convinced that the economic system no longer offers its old-time opportunities, youth sees increased intervention in this area by the federal government as its best chance of happiness.

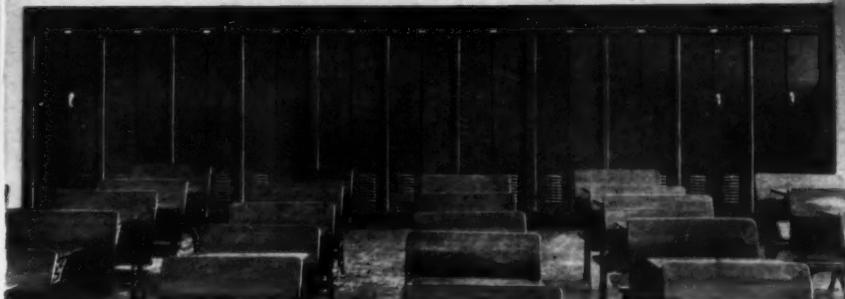
These conclusions, based on young people's own statements to interviewers,

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were presented to the American Youth Commission in a preliminary report on its recently completed survey of a scientifically selected "youth sample."

Seventy-three per cent thought the federal government should do something about wages and hours and a majority believed the government should provide them with jobs in times of unemployment.

VISUAL EDUCATION

Adult Conference

A conference on "Visual Education and the Adult," in which authorities will discuss the rôle of films in adult education, will be held May 13 and 14 at the Chicago campus of Northwestern University. Dr. Samuel N. Stevens, dean of the university college of Northwestern University, will be in charge.

The opening discussion on Friday evening will consider "Visual Aids in Industry." The first session on Saturday will discuss "Visual Aids in Community Classes," with emphasis on the

use of slides and motion pictures for informing the adult community of latest educational developments.

Dr. Robert A. Kissack Jr., director of visual education at the University of Minnesota, and Dr. Frank Freeman, professor of education at the University of Chicago, will participate in a study of "Visual Aids for College Classes" in the second Saturday talk.

Put Not Your Trust in Words

"Anne Boleyn was ironed on; wrote a school child in a composition. The teacher finally found in a book the pupil had been reading the sentence that had inspired the statement: 'Henry the Eighth pressed his suit against Anne Boleyn.'" This is an example cited by W. Gayle Starnes, assistant director of extension at the University of Kentucky, in pointing out the needs of visual aids in education.

Film Conference

A National Conference on Visual Education and its accompanying film

Films for the School Screen

Chemistry

Historical Introduction to the Study of Chemistry—Alchemists attempting to produce gold from the baser metals; Joseph Priestley in his laboratory performing the experiments that led to the discovery of oxygen; Priestley visiting Lavoisier in Paris, and the latter's experiment, which completed Priestley's discovery; application of chemistry to a number of modern industries, including agriculture. 1 reel. 16 mm., silent. For rent or for purchase. Teaching Films Division, Eastman Kodak Company, Rochester, N. Y.

Velocity of Chemical Reactions—Filmed under the direction of Dr. Melvin Brodshaug, in collaboration with the University of Chicago. Senior high school level. The effects of the nature of the reacting substances, of concentration of the reacting substances and of the temperature on the rate of chemical reactions are explained by interesting demonstration experiments and by animated drawings. Sound. For rent or for purchase. Erpi Picture Consultants, Inc., 250 West Fifty-Seventh Street, New York.

Arrangement of Atoms in Molecules—Technical discourse by Sir William Bragg on crystal structures. 4 reels. 35 mm., sound. For sale or for loan. General Electric Company, Visual Instruction Section, Schenectady, N. Y.

Chemistry of Combustion—A series of chemical experiments in the phenomena of oxidation and combustion, too dangerous for performance in the average laboratory. 1 reel. 16 mm., silent. For sale or for rent. Edited Pictures System, Inc., 330 West Forty-Second Street, New York.

Hottest Flame in the World—Dr. Irving Langmuir's experiments with vacuum tubes and hydrogen which led to the development of the atomic-hydrogen-welding process. Four reels. For rent, 16 mm., sound, by Instructional Films, Inc., Room 2205, 330 West Forty-Second Street, New York. Lent free, 35 mm. sound, by General Electric Company, Visual Instruction Section, Schenectady, N. Y.

Oxidation and Reduction—By Dr. Hermann I. Schlesinger and Dr. Harvey B. Lemon of the University of Chicago. The simultaneous process of oxidation and reduction is presented first by burning phosphorus and rusting iron under experimental conditions. Mercury rust is then decomposed to discover the component of air responsible for oxidation. The process of reduction is presented in the operation of the blast furnace, magnesium burning in dry ice, and thermite welding. 1 reel. 16 and 35 mm., sound. For sale or for rent. Erpi Picture Consultants, Inc., 250 West Fifty-Seventh Street, New York.

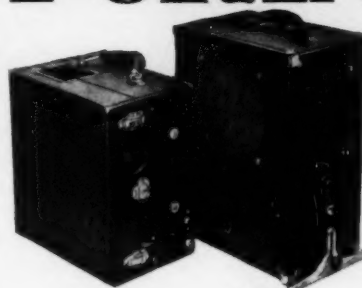


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DYNAMIC SPEAKER.

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After many months of research, Da-Lite presents a new washable, translucent screen fabric of amazing projection efficiency and durability. This new Dilaphane Da-Tex fabric is absolutely free from graininess, resulting in a uniform diffusion of light and pictures of remarkable clarity and definition. The Dilaphane Da-Tex screen will last for years—is fire-resistant, washable and will not discolor with age. The fabric is mounted in a sturdy frame equipped with a special tripod socket to fit the Da-Lite tripod furnished with each screen. The tripod is adjustable in height. Sizes range from 15" by 20" at \$15.00 to 30" by 40" at \$22.50. Ask your dealer about this and other modern Da-Lite screens or write for literature.

DA-LITE SCREEN CO., INC.

Dept. 5TNS, 2719 N. Crawford Ave.
CHICAGO, ILLINOIS

exhibition will be held June 20 to 23 at the Francis W. Parker School in Chicago. Selected industrial and educational films will be shown almost continuously during the conference as examples of the best current practice in visual education. Following presentation of the films representatives of producers and sponsors will lead discussions of photographic and scenario technic, advertising, educational and sales values.

Among the prominent speakers will be R. E. Hughes of the Evanston Township High School, Evanston, Ill.; L. W. Cochrane of the University of Iowa; Dr. James E. Bliss, Western Reserve University; Amelia Meissner, curator of the St. Louis Museum, and representatives of the U. S. Office of Education and of Will Hays and the motion picture industry.

RADIO

Mountain Conference

Many of the nation's leading educators, radio specialists and sociologists converged upon a little Kentucky mountain hamlet by the name of Gander the last week-end in April to hear mountaineers discuss radio programs. The occasion was the first annual conference of the twenty-seven directors of the radio listening centers that the University of Kentucky has established in the eastern Kentucky hills. Discussions related chiefly to merits of programs now on the air from the points of view of a large homogeneous group of Southern Appalachian listeners, radio executives and persons interested in education by radio. The listening

On the Air During May

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Daylight Saving Time.

Daily

12:30-1:30 p.m.—National Farm and Home Hour (NBC Blue).¹

Monday

2:30-3:00 p.m.—American School of the Air, Human Relations Forum, to run through May 2, will consist of a round table discussion among fourteen high school pupils of varying social and financial backgrounds; presented in cooperation with the Progressive Education Association's commission on human relations with Dr. Alice Kelliher directing.

5:00-5:15 p.m.—Madeline Gray, Children's Corner (CBS).

5:15-5:30 p.m.—"New Horizons," sponsored by the American Museum of Natural History (CBS).

7:00-7:15 p.m.—Music Is My Hobby (NBC Blue).

10:30-11:00 p.m.—National Radio Forum (NBC Blue).

Tuesday

2:30-3:00 p.m.—NBC Music Guild (NBC Blue).

2:30-3:00 p.m.—American School of the Air, American literature alternating with music (CBS).

May 3—Literature Quiz.

4:00-4:45 p.m.—Current Questions Before the House (CBS).

6:00-6:15 p.m.—Science in the News (NBC Red).

5:00-5:30 p.m.—Let's Pretend, a program of fairy stories for children (CBS).

Wednesday

2:00-2:30 p.m.—Your Health, supplementary material for health teaching in junior and senior high schools, sponsored by the American Medical Association (NBC Red).

May 4—Healthier Mothers.

May 11—Hospitals Aid Health.

May 18—Runabouts, 1938 Model.

May 25—The Health Checkup.

2:30-3:00 p.m.—American School of the Air, geography (CBS).

May 4—Charleston and the Sea Islands.

5:15-5:30 p.m.—Exploring Space, sponsored by the American Museum of Natural History (CBS).

5:00-5:15 p.m.—Madeline Gray, Children's Corner (CBS).

6:00-6:15 p.m.—Our American Schools, sponsored by the N. E. A. to promote teacher welfare and better support for schools (NBC Red).

7:45-8:00 p.m.—Science on the March (NBC Blue).

7:45-8:00 p.m.—Adult Education Program (CBS).

Thursday

2:00-2:30 p.m.—NBC Music Guild (NBC Red).

2:30-3:00 p.m.—American School of the Air, international music programs broadcast by short-wave from European schoolrooms (CBS).

4:00-4:15 p.m.—Adventures in Science (CBS).

4:30-5:00 p.m.—Education for Living, sponsored by the General Federation of Women's Clubs (NBC Blue).

5:00-5:30 p.m.—Let's Pretend, a program of fairy stories for children (CBS).

7:45-8:00 p.m.—Science on the March, under auspices of the American Society for the Advancement of Science (NBC Blue).

9:30-10:30 p.m.—America's Town Meeting of the Air (NBC Blue).

Friday

2:30-3:00 p.m.—American School of the Air, vocational guidance (CBS).

May 6—Send-off: New Worlds to Conquer.

3:00-4:00 p.m.—NBC Radio Guild (NBC Blue).

3:30-3:45 p.m.—Current Questions Before the Senate (CBS).

5:00-5:15 p.m.—Madeline Gray, Children's Corner (CBS).

6:00-6:15 p.m.—Education in the News, dramatization of news items in education by the U. S. Office of Education (NBC Red).

7:15-7:30 p.m.—The Story Behind the Headlines, presented under joint auspices of American Historical Association and NBC, Cesar Saerchinger, radio commentator. (NBC Blue).

Saturday

10:30-10:45 a.m.—The Child Grows Up (NBC Blue).

11:00-11:15 a.m.—Our American Schools, sponsored by the N. E. A. to bring home and school in closer cooperation (NBC Red).

11:30 a.m.-12:00 m.—Music and American Youth (NBC Red).

5:00-5:30 p.m.—Stories of Industry, sponsored by the U. S. Department of Commerce (CBS).

5:00-6:00 p.m.—Great Plays (NBC Red).

9:30-10:00 p.m.—American Portraits (NBC Red).

Sunday

12:30-1:00 p.m.—University of Chicago Round Table (NBC Red).

3:00-5:00 p.m.—New York Philharmonic-Symphony Orchestra (CBS). Final Concert May 1.

4:30-5:00 p.m.—The World Is Yours, thrilling adventures in the world of science by the Smithsonian Institution (NBC Red).

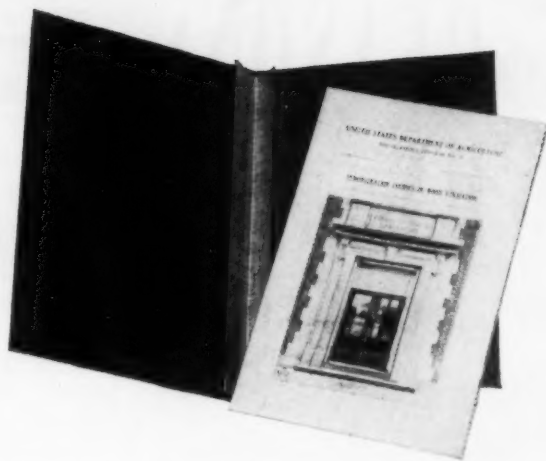
¹Except Sunday.



Gaylord Pamphlet Binder, shown at right — makes pamphlets look better, handle easier and last longer.



Gaylord Multibinder, above, keeps magazines all in one piece, protects covers and facilitates handling.



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Gaylord Pamphlet Binders give a substantial appearance to your leaflets and small magazines — make them easier to handle and protect covers and pages against wear and tear. Easy to bind — just moisten gummed strip and insert booklet. Inexpensive. A wide variety of sizes, styles and colors.

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Pyra-Seal penetrates deeply and dries hard. It seals the pores in the wood and ties the surface fibers into an integral whole. The tough long-wearing, flexible Pyra-Seal coating which protects the entire surface of the wood is impervious to acids, alcohol, alkali, ink and hot or cold water. It will outwear ordinary finishes many times over because it presents tremendous resistance to abrasion and friction. It will not chip, crack or peel and dries to a smooth, lustrous finish that is non-slippery to foot traffic.



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In basketball and other indoor sports, speedy, spectacular play needs the confidence of sure footing—a fast, yet slip-proof floor that encourages teams to "cut loose." And that kind of game is the magnet that pulls them in at the gate.

Athletic boards and coaches are discovering the spectacular cash value of Pyra-Seal treated floors. These permit lightning-fast play with the assurance of non-slip protection. Pyra-Seal finished floors STAY fast, too. Years of constant use will not slow them up nor mar their handsome sheen . . . the most practical and most economical floor finish for gymnasium and other school floor purposes.

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NOISE-ABSORBING ceilings for swimming pools must offer more than high acoustical efficiency. They must provide thermal insulation to prevent condensation and to insure low heating costs. They must be unaffected by dampness and easy to maintain.

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1. Corkoustic has a noise-reduction coefficient of 50%—a sound-absorption coefficient of 62% at 512 cycles. It effectively kills booming echoes and reverberation.

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Write now for your file-sized copy of "How to Reduce Noise." Armstrong Cork Products Company, 1234 State Street, Lancaster, Pennsylvania.



Armstrong's CORKOUSTIC

for noise-quieting and acoustical correction

center system was established by the university in 1933.

Transatlantic Broadcast

The first international broadcast on any health problem will be heard over the NBC's red network on the evening of May 2, Child Health Day. Leading British and American physicians will confer by radio on a menace to child health, rheumatic heart disease.

Summer Workshop

New York University will conduct its fifth summer radio workshop for those interested in radio script writing, acting and production from July 5 to August 12 at the New York University radio studios on Washington Square.

Actual practice in putting programs on the air, observation of rehearsals and performances of programs on nationwide broadcasting chains and lecture-discussions by guest lecturers at which radio equipment, transcription methods and television operation will be demonstrated are included in the curriculum.

The teaching staff will include Philip H. Cohen, production director, educational radio project, U.S. Office of Education; Burke Boyce, former director of continuity, N.B.C., and Earl McGill, casting director, C.B.S., and production director, American School of the Air.

Students specializing in radio production will present workshop programs over various New York stations each week.

Verbal Exploration

"Exploring Space," a radio series devoted to exploration of the planets, has been inaugurated by the Columbia Broadcasting System and the American Museum of Natural History. Two officials of the museum appear on each broadcast, Prof. William H. Barton, Jr., executive curator of the Hayden Planetarium, and Hans Christian Adamson, a director of the museum. Professor Barton devotes his talk to two interesting phases of planets: why it is almost impossible to get to one and what would happen to a human being if it were possible. Mr. Adamson is heard in the role of the narrator on each program. The program is broadcast each Wednesday from 5:15 to 5:30 p. m. (E.S.T.)

Formulate Radio Policy

President Nicholas Murray Butler of Columbia University has appointed a faculty committee to formulate a university policy regarding radio composed of Provost Frank D. Fackenthal, Dean Herbert E. Hawkes of Columbia College, Dean Virginia C. Gildersleeve of Barnard College, Dean George B. Pegram of the graduate faculties, Dean

Coming Meetings

May 6-7—American Council on Education, Washington, D. C.

May 15-20—National Congress of Parents and Teachers, Salt Lake City, Utah.

June 6-10—Short Course for School Cafeteria Managers, Oklahoma A. & M. College, Stillwater.

June 9-11—School Administrators Conference, George Peabody College for Teachers, Nashville, Tenn.

June 20-23—National Conference on Visual Education, Francis W. Parker School, Chicago.

June 20-25—National Association of Engineers and Custodians, St. Louis.

June 21-24—Sixth Annual Custodian Training School, Iowa State College, Ames.

June 26-30—National Education Association, New York City.

June 27-July 7—American Association for Teachers of the Deaf, Wayne University, Detroit.

June 30-July 1—Conference on Business Education, University of Chicago.

July 1-15—Conference of the N.E.A. Department of Elementary School Principals, New York.

Oct. 10-14—National Association of Public School Business Officials.

Oct. 13-15—Vermont Education Association, Burlington.

Oct. 19-22—National Council on Schoolhouse Construction, New Capital Hotel, Frankfort, Ky.

Oct. 19-21—New Hampshire State Teachers' Association, Concord.

Oct. 20-22—Wyoming Education Association, Rawlins.

Oct. 26-28—West Virginia State Education Association, Charleston.

Oct. 26-28—North Dakota Education Association, Fargo.

Oct. 27-28—Indiana State Teachers' Association, Indianapolis.

Oct. 27-28—Maine Teachers' Association, Bangor.

Oct. 27-29—Minnesota Education Association, Minneapolis.

Oct. 27-29—Rhode Island Institute of Instruction, Providence.

Oct. 27-29—Montana Education Association, district conventions, Kallispell, Billings, Great Falls and Bozeman.

Oct. 27-29—Colorado Education Association, district conventions, Denver, Pueblo and Grand Junction.

Oct. 28—Connecticut State Teachers' Association, New Haven, Hartford and Bridgeport.

Oct. 28-29—Maryland State Teachers' Association.

Nov. 3-5—Iowa State Teachers' Association, Des Moines.

Nov. 3-4—Arkansas Education Association, Hot Springs or Little Rock.

Nov. 4-5—Kansas State Teachers' Association, Kansas City, Topeka, Salina, Hays, Garden City, Hutchinson, Wichita and Pittsburgh.

Nov. 6-12—American Education Week.

Nov. 10-11—Delaware State Education Association, Newark.

Nov. 10-12—New Jersey State Teachers' Association, Atlantic City.

Nov. 16-19—Missouri State Teachers' Association, Kansas City.

Nov. 20-23—South Dakota Education Association, Mitchell.

Nov. 22-25—Virginia Education Association, Richmond.

Nov. 24-26—Texas State Teachers' Association, Dallas.

Nov. 25-26—Idaho Education Association, Boise.

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1. That includes correlated functional arithmetic, handwriting, and vocabulary training.
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3. That makes the student aware of the business forces and business practices that affect his life from early youth to old age.
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5. That makes future commercial studies more meaningful, more effective, more valuable.
6. That is supplemented by a teacher's methods book, an optional work book program, and modern tests that are impressive.

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Four days' and evenings' intensive study of latest and best educational films . . . an array of educational government and industrial authorities . . . these are highlights in the 1938 National Conference program.

You will have an opportunity not only to see the best "educationals," but will be admitted to the "inside" of their production and educational use.

Don't miss this opportunity to learn from authoritative, first-hand sources the fine points of educational films and to discuss your problems openly with others who may be facing problems similar to yours.

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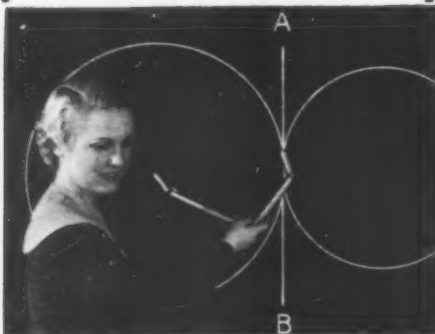
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A durable, velvety writing surface—tested universally in the past half century—applied to a solid wood fibre backing.



*[The above boards also supplied
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Manufacturers, Chicago Heights, Ill.

William F. Russell of Teachers College, Dean Joseph B. Barker of the school of engineering and Dean Carl W. Ackerman of the graduate school of journalism, chairman.

Enters Eighth Year

Many university and college broadcasts have been dismal failures, but the University of Chicago's Round Table, launched seven years ago in February, has survived all but a scattered few radio programs of 1931.

The program was launched with the idea of stimulating an interest in public problems and affairs. Last year the Woman's National Radio committee acclaimed it the best program in its special field.

Although the subject matter has been of paramount concern, probably the popularity of the program is due in part to the informal manner in which it is handled. Three speakers, well informed on the subject for discussion, each Sunday gather about the round table at the Quadrangle Club on the Midway campus and informally talk over various aspects of the problem. Spontaneity and sprightliness are gained through extemporaneous discussions.

MEETINGS

Peabody Administration Conference

Educational implications of the socioeconomic problems confronting Southern regions will be considered by approximately 1000 school administrators who will assemble at Peabody College June 9 to 11 for the ninth annual School Administrators Conference. One hundred leading superintendents in the Southern states will present their solutions to this problem and outstanding Southern newspaper editors and educators are scheduled for addresses on this subject.

A summarization of all the answers will be compiled for presentation at the banquet on the closing evening of the conference.

Approximately fifty exhibits of equipment, supplies and books will be shown. No fees are charged persons attending the conference. Detailed information may be obtained by writing Dennis H. Cooke or Ray L. Hamon at Peabody College.

Elementary Education Conference

Immediately following the annual meeting of the National Education Association in New York, the department of elementary school principals will

hold its second annual conference on elementary education from July 1 to 15 under joint auspices of that department and the school of education of New York University. College credit may be received for attendance at this conference.

Student Government Conference

The eighth annual convention of student government officers and their faculty advisers, sponsored jointly by the National Association of Student Officers and the National Conference on Student Participation both of which are affiliated groups of the National Education Association, will be held in New York, June 28 to 30, in connection with the summer meeting of the N.E.A.

Custodian Training School

Through its general extension division the University of Minnesota will sponsor another summer school for building engineers and custodians, June 13 to 17.

Subjects will be selected partially by those in charge of the course and partially by those in attendance. The group will not be divided and the topics will be covered first by a lecture, followed by a conference in which the entire group will participate. The curriculum has been divided into three sections: housekeeping and sanitation, heating and ventilating, and maintenance and management.

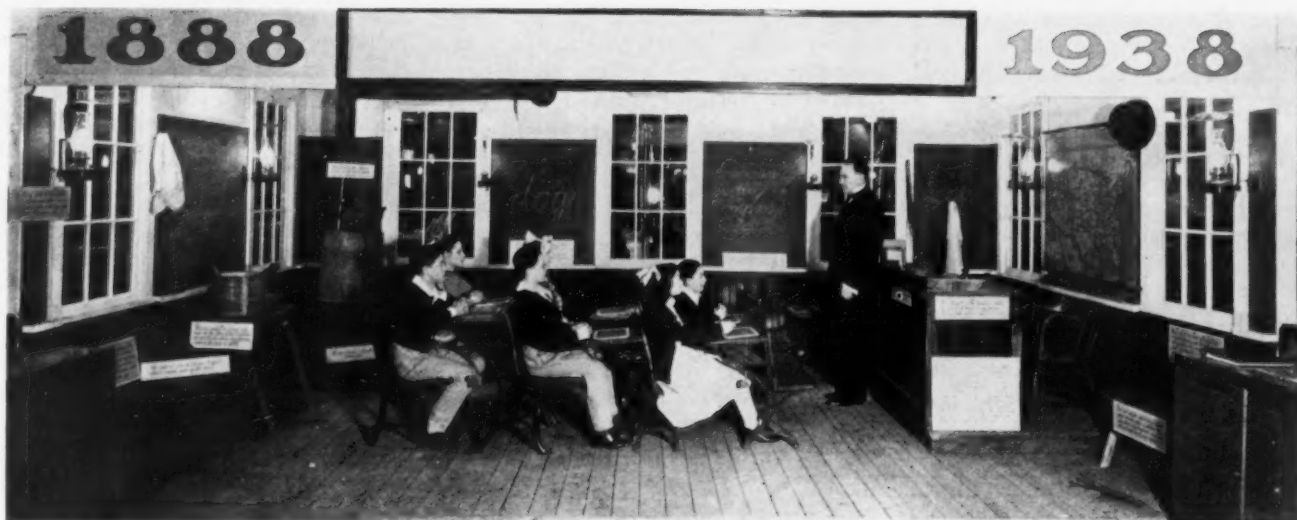
There is a small registration fee and living accommodations may be obtained at reasonable prices.

Council on Education

The American Council on Education will assemble May 6 and 7 in Washington, D. C., for its twenty-first annual meeting under the chairmanship of Dr. Edward C. Elliott, president of Purdue University. More than 300 associations will be represented.

American Education Week

The general theme for American Education Week, November 6 to 12, will be "Education for Tomorrow's America," it has been announced by the National Education Association. The daily programs will be built around the following themes: Sunday, "Achieving the Golden Rule"; Monday, "Developing Strong Bodies and Able Minds"; Tuesday, "Mastering Skills and Knowledge"; Wednesday, "Attaining Values and Standards"; Thursday, "Accepting New Civic Responsibilities"; Friday, "Holding Fast to Our Ideals of Freedom," and Saturday, "Gaining Security for All."



N. Y. Fair Education Committee

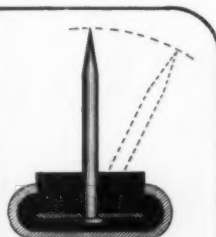
Eighteen educators will serve as a committee on education for the New York World's Fair of 1939. This group is completing surveys of plans for exhibits and demonstrations of all kinds of educational activities in the United States. The committee is headed by Dr. Harry Woodburn Chase, chancellor of New York University and those associated with him are:

Dr. James Rowland Angell, former president of Yale University, educational counselor of the National Broad-

This "reading, 'riting and 'rithmetic" schoolroom of half a century ago was a center of much attention at the A.A.S.A. convention in Atlantic City. Part of one of the commercial exhibits, it gave a typical picture of the interior of the little red schoolhouse. Everything was complete from the water bucket, slates, dunce stool, iron bootjack, cast iron tea kettle and bell to the costumes worn by the children who occupied the old desks. The purpose of the display was to show that although the present day school has outlawed most of these ancient relics, thousands of obsolete school desks still remain — the lone survivors of the horse and buggy days in elementary education.

casting Company; Dr. Stephen F. Bayne, associate superintendent of schools; Prof. Marston Taylor Bogart

of Columbia University; Prof. Lyman Bryson of Teachers College, Columbia University; Dr. Harold C. Campbell,



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New York superintendent of schools; Dr. Harvey N. Davis, president of Stevens Institute of Technology; Dr. Ned Dearborn, dean of New York University.

Dr. Stephen A. Duggan, director of the Institute of International Education; Dr. Edward C. Elliott, president of Purdue University; Lawrence Frank of the Josiah Macy Jr. Foundation; Rev. Robert I. Gannon, president of Fordham University; Virginia Gildersleeve, dean of Barnard College; Dr. Paul Klapper, president of Queens College; Dr. Mark May of Yale University; Dr. Howard W. Odum, director of research in social sciences, University of North Carolina; Dr. Carson Ryan of the Carnegie Foundation, and Donald Slesinger, who will be executive secretary of the committee.

TRANSPORTATION

Schoolboy Bus Drivers

North Carolina's vast system of state maintained consolidated schools that transports almost 300,000 children leans heavily upon the economy of bus operation. The cost this year runs less than \$6 per pupil.

The surprising fact is that 3600 of

North Carolina's school buses are driven by high school pupils, who have improved, and not lowered, the safety record in North Carolina. In the current school year to date there has not been a fatality or serious accident in the school bus system in a state which has a bad highway accident record. Last year there was only one fatal accident. The year before there were two fatal accidents, but again in 1934-35 there was not a single fatality.

So far as available records show, there is no highway transportation record equal to this one set by North Carolina's keen-eyed young drivers.

The use of high school boys—and a few girls—as bus drivers did not start with the state's taking over control of schools in 1933. Counties already had found that in most instances pupils made better drivers, were more cautious, more dependable and took greater interest in the children than most adult drivers. County school boards in North Carolina still have authority to employ adult drivers if they are willing to supplement state pay to make up the difference in schoolboy wages.

The \$9.50 a month that the state pays schoolboy drivers is only a minor reason the posts are eagerly sought. The drivers are selected with the great-

est care. Drivers must be at least 16 years of age. They must be of the highest character and must maintain a good record in studies and deportment and must have an excellent intelligence rating. Principals nominate eligible drivers who are given a strict examination by the state highway patrol, including actual operation of buses on the regular routes. A written examination is given, covering state laws on driving and on bus operation. Those who make the best grades are given special certificates by the highway safety division and no award possible in a rural school is coveted with more eagerness. Dismissal swiftly follows recklessness, the keenest of disgraces.

Actual driving, however, does not tell the whole story back of the state's safety record. The young drivers are required to see that their buses are loaded and unloaded with a minimum of risk. Many drivers, with the approval of their superintendents, name one or two older pupils on each bus to act as monitors. These help smaller children on and off the buses.

When it is necessary for youngsters to cross the highway, the monitors see that they are entirely off the highway and safely up the lane before the bus starts again.

How Chewing Gum keeps those alluring young smiles

Take pleasure in the healthy, daily enjoyment of chewing gum. As soon as toddlers are old enough to chew gum, let them enjoy it, too. You get a satisfying sweet which in no way spoils your appetite. The chewing stimulates beneficial circulation in neglected gums and brightens and cleanses your teeth. Thus it helps to keep your smile young and charming. There's a reason, a time and place for gum. Begin today to use gum for health, looks, pleasure.

UNIVERSITY RESEARCH IS THE BASIS OF THIS ADVERTISEMENT. THE NATIONAL ASSOCIATION OF CHEWING GUM MANUFACTURERS, STATEN ISLAND, NEW YORK



NAMES IN NEWS

Superintendents

H. W. ADAMS, superintendent of schools at Corvallis, Ore., for the last eight years, has resigned to accept the city superintendency at Silverton, Ore. Noteworthy among Mr. Adams' administrative achievements at Corvallis was the erection of the new \$291,778 high school plant two years ago.

EARL H. BABCOCK, superintendent of schools at Grand Haven, Mich., recently was elected president of the Michigan Education Association, succeeding HARLEY W. HOLMES, superintendent of schools at Marshall, Mich.

DR. E. R. VAN KLEECK, superintendent of schools at Norwich, N. Y., has been reelected at a salary increase of \$500.

VIRGIL B. WILEY, whose term as superintendent of schools at Dover, Del., ends in June, will become the new head of schools at Selbyville, Del.

NICHOLAS BAUER, superintendent of schools, New Orleans, has been chosen recipient of the *New Orleans Times-Picayune* loving cup awarded to an outstanding local citizen for civic endeavor. In May Superintendent Bauer will complete his fifteenth year as su-

perintendent of the Orleans Parish school board.

C. E. ROGERS on July 1 will succeed ROY G. BIGELOW as superintendent of schools, Johnson City, Tenn.

E. PERLEY EATON, principal of the Groveland High School, Groveland, Mass., has been elected superintendent of schools of the school district including the towns of Groveland, Georgetown, Rowley and Boxford, Mass.

CHARLES L. STEPHENSON, superintendent of schools at Sheffield, Mass., has been elected superintendent of schools of Pepperell, Tyngsboro and Dunstable, Mass.

ALDEN A. WOODWORTH of Washburn, Me., has been elected superintendent of schools at Lewiston, Me.

FRANK B. HILL has accepted the superintendency of schools at Rule, Tex. Mr. Hill is now principal of Wilson School at Childress, Tex.

CLINTON V. BUSH has been appointed superintendent of schools, Jamestown, N. Y. He has been associated with the Jamestown schools since 1924 as head of the junior high school and as director of adult education in the night school. Since 1932 he has served also as assistant superintendent of schools. HUGH L. GILLIS, principal of Lincoln Junior High School, will become the new assistant superintendent.

CHARLES E. DAMRON was elected superintendent of schools at Childress, Tex., recently, succeeding A. W. ADAMS.

JOE E. WEBB, principal of the senior high school at Slaton, Tex., has been named superintendent of Slaton schools.

MATTHEW TORMA, who is teacher in the city schools of Winona, Mich., has been appointed superintendent of the Ironwood township schools to succeed JOHN G. QUARTERS.



JOE YOUNG, principal of Cotulla High School for six years, has been elected superintendent of schools at Cotulla, Tex., succeeding R. H. MAYFIELD, who resigned to accept the superintendency of Weimer schools.

Principals

HERBERT W. SMITH, principal of Fieldston School of Teachers College, Columbia University, has been named principal of the Francis W. Parker School, Chicago. He will succeed RAYMOND OSBORNE, who has resigned because of ill health.

ISAAC W. FINLEY has been elected principal of the Woodbury High School, Nashville, Tenn.

D. LEON McCORMAC, head of Wardlaw School, Columbia, S. C., has been appointed principal of Dreher High School, Columbia; ROBERT O. NELSON,

			
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principal at McMaster Grammar School, will replace Mr. McCormac, and W. CLARK BROCKMAN will succeed Mr. Nelson.

ALFRED F. GAY, principal of Powers Institute in Bernardston, Mass., has been elected principal of Groveland High School, Groveland, Mass.

State Departments

DR. HARRY L. KRINER, dean of instruction of the California State Teachers College, California, Pa., has been appointed assistant director of teacher education and certification in the Pennsylvania Department of Public Instruction.

DILL D. BECKMAN of Langley, S. C., will take up work with the South Carolina State Department of Education. Mr. Beckman has been director of athletics and principal of the Langley-Bath High School for the last three years.

DR. ERNEST W. BUTTERFIELD, state commissioner of education for Connecticut for the last eight years, resigned in early March at the request of the state board of education, although neither the board nor Doctor Butterfield made public the reasons for their actions. It is expected he will terminate his duties about June 30. Con-

troversies over the state normal school, friction with local superintendents over a period of years and political considerations are understood to be major factors that led to the resignation.

DR. H. V. HOLLOWAY has been re-elected superintendent of public instruction by the Delaware State Board of Education. DR. JOHN SHILLING, assistant in charge of secondary schools, and DR. H. B. KING, assistant in charge of elementary schools, also were reelected.

LOIS M. CLARK, a member of the faculty of West Chester State Teachers College, West Chester, Pa., has been appointed elementary school adviser in the Pennsylvania State Department of Public Instruction.

In the Colleges

DR. HERMAN B. WELLS, former dean of the school of business administration, took office as president of Indiana University on March 22, becoming at the age of 35 the youngest state university president in America. President Wells is the seventy-first alumnus of Indiana University to become a college president. He succeeds DR. WILLIAM LOWE BRYAN, who retired last June.

DR. WALTER H. RYLE will be inducted as seventh president of the

Northeast Missouri State Teachers College, Kirksville, on May 19.

DR. HARL R. DOUGLASS assumed his duties as the new head of the division of education and teacher training of the University of North Carolina on March 21.

DR. ELAM J. ANDERSON, president of Linfield College at McMinnville, Ore., has been elected president of the University of Redlands.

H. T. WIDDOWSON, who has been supervisor of trade and industrial education for the Minnesota State Department of Education, has been appointed assistant professor of education at the University of Minnesota.

DR. THOMAS W. BIBB has resigned as president of Albany College, Albany, Ore., which will be discontinued at Albany in June in favor of the branch in Portland. The Portland branch of the college was founded as a two-year school in 1934. With its doors closed in Albany, a four-year institution will be opened in Portland. Doctor Bibb's resignation will become effective October 1.

Resignations and Retirements

DR. GEORGE W. RIGHTMIRE, president of Ohio State University since 1926, has notified the board of trustees

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that he wishes to retire on July 1. He will reach the retirement age of seventy next November.

ARTHUR WENTWORTH HEWITT has resigned the presidency of Vermont Junior College and the headmastership of Montpelier Seminary, Montpelier, Vt.

MAURICE CARMANY, head of the schools at Mecosta, Mich., for seven years, has announced his resignation effective in May. He will be succeeded by ANDREW L. DOYLE, faculty member.

EDWIN C. ANDREWS, superintendent of the school system at Greenwich, Conn., since 1910, has announced that he will retire this year.

CLAUDE A. DUVALL, superintendent of schools in the village of Solvay, N. Y., has submitted his resignation, effective August 1. He recently celebrated his seventy-first birthday.

ROBERT E. LARAMY, superintendent of the schools at Altoona, Pa., for the last sixteen years, has announced his intention to retire on July 1.

FREDERIC N. BROWN, supervising principal of schools at Verona, N. J., since 1903, is retiring from that position on June 30.

REVERDY E. BALDWIN, supervising principal of Gowanda High School, Gowanda, N. Y., for nineteen years, has tendered his resignation to become effective at the end of the school year.

C. D. MILLER has resigned as superintendent of schools at Greensburg, Kan., effective at the close of the school year.

ALBERT A. DREIER, principal of the senior high school, York, Neb., for thirteen years, has announced his resignation.

JOHN E. COLBURN, principal of Burlington High School, Burlington, Vt., for twenty-five years, has resigned, his retirement to take effect at the close of the school year in June.

Miscellaneous

GEORGE H. REAVIS, former director of instruction of the Ohio State Department of Education, has been appointed director of curriculum for the Cincinnati public schools.

EDWARD W. RUSHTON of Batesburg, S. C., has been elected president of the South Carolina Education Association. He succeeds M. E. BROCKMAN of Chester.

MILTON B. TAYLOR has been appointed executive secretary of the Utah Education Association to replace B. A. FOWLER, who resigned.

DR. RICHARD D. ALLEN, assistant superintendent of schools in Providence, R. I., has been appointed a part-time expert consultant in guidance for the U. S. Office of Education.

J. FOLWELL SCULL JR. of Narberth, Pa., has been named headmaster of the Scranton Country Day School, Scranton, Pa.

Deaths

DR. JAMES N. RULE, former state superintendent of public instruction for Pennsylvania, died following an operation performed several weeks ago in Washington, Pa. Doctor Rule, who was 61 years old, was principal of Langley High School, Pittsburgh.

DR. CLARENCE E. MELENEY, former associate superintendent of schools, New York City, died at his home in White Plains, N. Y.

WELLS A. HALL, superintendent of schools at Concord, Mass., for thirty-one years, died recently.

ALICE FLORER, former state superintendent of education in Nebraska, died recently.

A. H. WATERHOUSE, 79, superintendent of schools at Fremont, Neb., since 1906, died recently. Last year he celebrated his fiftieth anniversary as an educator.

DR. ALLEN S. MARTIN, for fourteen years superintendent of schools, Hadonfield, N. J., died of heart attack at the age of sixty-seven. Doctor Martin retired July 1, 1936, after a notable career in education.

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PREFACE TO TEACHING. By Henry W. Simon. New York: Oxford University Press, 1938. Pp. 98. \$1.50.

Should be read by every person entering the teaching profession and would be helpful to many already in service.

THE INTELLIGENT INDIVIDUAL AND SOCIETY. By P. W. Bridgman. New York: The Macmillan Company, 1938. Pp. vi+305. \$2.50.

Provocative treatment of complicated problems by a mature and observant scholar; old ideas and concepts are discussed with a freshness of viewpoint that makes for keen interest if not agreement.

THE DEVELOPMENT OF MEANING VOCABULARIES IN READING. *An Experimental Study.* By William S. Gray and Eleanor Holmes. Publications of the Laboratory Schools, No. 6. Chicago: The University of Chicago, 1938. Pp. xii+140. \$1.50.

"Careful, intelligent teaching of groups and individuals will promote vocabulary development which functions in speech, reading and writing."

SECONDARY-SCHOOL ADMINISTRATION: ITS PRACTICE AND THEORY. *A Case and Problem Book.* By Edwin J. Brown. Boston: Houghton Mifflin Company, 1938. Pp. xx+351. \$2.25.

Problem and case book for students of secondary school administration. Arresting presentation.

WE LIVE AND LEARN. *Addresses on Education.* By Sir Josiah Stamp. New York: The Macmillan Company, 1938. (Printed in Great Britain). Pp. vii+214. \$2.90.

Nine addresses on education by a brilliant British scholar. Recommended for professional reading.

THE STORY OF INSTRUCTION. *The Church, the Renaissance and the Reformation.* By Ernest Carroll Moore. New York: The Macmillan Company, 1938. Pp. ix+575. \$4.

Second in a series of the relation of instruction to the culture which it served, this volume carries forward the story to include the church, the renaissance and the reformation. Simple style makes it interesting both to the general reader and student of history.

THE UNDERAGE STUDENT IN HIGH SCHOOL AND COLLEGE. *EDUCATIONAL AND SOCIAL ADJUSTMENTS.* By Noel Keys. University of California Publications in Education. Berkeley: University of California Press, 1938. Pp. viii+271. \$1.25.

Under certain balanced conditions this research discovers nothing harmful in two years of acceleration in terms of age-grade conventions.

SCHOLASTIC, ECONOMIC AND SOCIAL BACKGROUNDS OF UNEMPLOYED YOUTH. By Walter F. Dearborn and John W. M. Rothney. Harvard Bulletins in Education, No. 20. Cambridge: Harvard University Press, 1938. Pp. xi+172. \$1.50 (Paper Cover).

An excellent argument for the rational development and extension of guidance activities.

SELECTED REFERENCES IN EDUCATION, 1937. *Reprinted from the School Review and the Elementary School Journal for January to December, 1937. Supplementary Educational Monographs.* Chicago: The University of Chicago, 1938. Pp. x+224. \$0.90 (Paper Cover).

Of interest not only to the institutional library but also of value for ready reference to the school executive and teachers.

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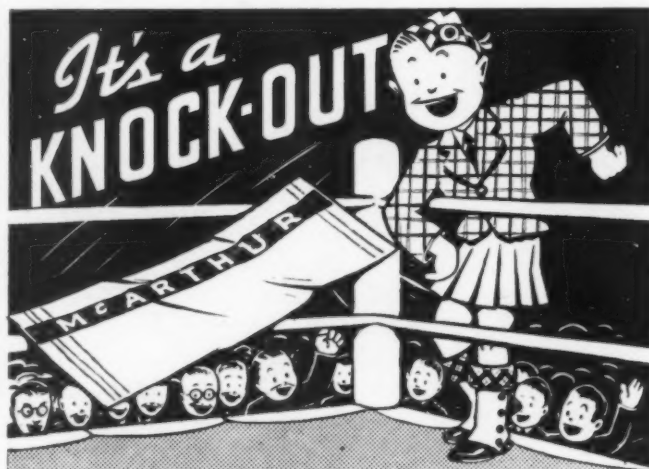
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SCHOLARS, WORKERS AND GENTLEMEN. By Malcolm S. MacLean. *The Inglis Lecture*, 1938. Cambridge: Harvard University Press, 1938. Pp. 86. \$1. Brief description of the dynamic school of the future growing out of present still rather hazy tendencies.

Just Off the Press

THE WORKS PROGRESS ADMINISTRATION IN NEW YORK CITY. By John D. Millett. Published for the Committee on Public Administration of the Social Science Research Council. Chicago: Public Administration Service, 1938. Pp. xi+228. \$3.

SEVEN DAYS AT SEA. By Ruth Strang, Barbara Stoddard Burks and Helene Searcy Puls. Drawings by Theresa Kalab. New York: Bureau of Publications, Teachers College, Columbia University, 1938. Pp. viii+117. \$1.

HERE AND THERE AND HOME. By Ruth Strang, Barbara Stoddard Burks and Helene Searcy Puls. Drawings by Theresa Kalab. New York: Bureau of Publications, Teachers College, Columbia University, 1938. Pp. vi+120. \$1.

SCIENCE IN OUR LIVES. By Benjamin C. Gruenberg and Samuel P. Unzicker. Yonkers: World Book Company, 1938. Pp. xiv+750. \$1.76.

THE GIRL RESERVE MOVEMENT OF THE YOUNG WOMEN'S CHRISTIAN ASSOCIATION. *An Analysis of the Educational Principles and Procedures Used Throughout Its History*. By Catherine S. Vance. Contributions to Education, No. 730. New York: Bureau of Publications, Teachers College, Columbia University, 1937. Pp. ix+184. \$1.85.

A MEASUREMENT OF THE ACHIEVEMENT IN MOTOR SKILLS OF COLLEGE MEN IN THE GAME SITUATION OF BASKETBALL. By Glenn W. Howard. Contributions to Education, No. 733. New York: Bureau of Publications, Teachers College, Columbia University, 1937. Pp. v+109. \$1.60.

A TECHNIQUE FOR APPRAISING CERTAIN OBSERVABLE BEHAVIOR OF CHILDREN IN SCIENCE IN ELEMENTARY SCHOOLS. By Joe Young West. Contributions to Education, No. 728. New York: Bureau of Publications, Teachers College, Columbia University, 1937. Pp. vii+118. \$1.60.

THE SIX-YEAR RURAL HIGH SCHOOL. *A Comparative Study of Small and Large Units in Alabama*. By John Ingle Riddle. Contributions to Education, No. 737. New York: Bureau of Publications, Teachers College, Columbia University, 1937. Pp. vi+101. \$1.60.

ALGEBRA FOR PARENTS. *A Textbook of Elementary Algebra*. By Samuel B. Scott. Philadelphia: The Magee Press, 1937. Pp. xii+236. \$2.50.

HOW TO ORGANIZE AND CONDUCT A MEETING. Revised Edition. By W. H. F. Henry and Levi Seeley. New York: Noble and Noble, Publishers, Inc., 1938. Pp. v+133. \$1.50.

PROBLEMS AND VALUES OF TODAY. Volume One. *A Series of Students' Guidebooks for the Study of Contemporary Life*. By Eugene Hilton. Illustrations by Ruth Taylor. Boston: Little, Brown and Company, 1938. Pp. xviii+639. \$1.60.

EVERYDAY ECONOMICS. Revised Edition. By Cornelius C. Janzen and Orlando W. Stephenson. New York: Silver Burdett Company, 1938. Pp. xiii+512+xviii. \$1.68.

CONSUMER MATHEMATICS. *A Guidance Course in Commercial Relations*. By Anne Louise Cowan. Harrisburg, Pa.: Stackpole Sons, 1938. Pp. xiv+324. \$1.23.

AMERICAN WINGS. *Modern Aviation for Everyone*. By Captain Burr Lenson. Illustrated. New York: E. P. Dutton & Co., Inc., 1938. Pp. 214. \$2.

DESIGNS FOR PERSONALITY. By Margaret E. Bennett and Harold C. Hand. New York: McGraw-Hill Book Company, Inc., 1938. Pp. 222. \$1.36.

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His new jailer is the Neatsnap extruded aluminum blackboard frame manufactured by New York Silicate Book Slate Company, Inc., 421 Seventh Avenue, New York City. The installing of the Neatsnap, it is asserted, can be done simply by any skilled carpenter possessed of a metal saw, a soft metal file and the proper specifications. The frames are claimed to hold the slate slabs tightly in place, also to be impervious to defacement and easily kept clean with soap and water.

Savadesk With Metal

If all the amateur wood carvers who have whittled hunks out of their school desks were lined up in a row, what a merry time the school custodian could have with a willow switch! The face-

lifting job that an ingenious boy with a knife can execute on his desk would make a plastic surgeon green with envy.

However, adult joy-killers apparently have the situation well in hand. A metal desk top, called Savadesk, which can be slipped over the existing wooden desk top is being distributed by the firm of Montgomery & Wilcox, 1211 Chestnut Street, Philadelphia. The Savadesk is made of special stretcher leveled steel which, it is stated, will not buckle or bulge and is formed in such a way as to fit snugly over the original wood top. Furthermore, the metal is not noisy. The wood top acts as a filler for the metal top, thereby deadening any metallic sound.

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Nonslip Tread

The old gag about slipping on the stairs and coming down ceases to be funny when it really happens, even if the only injury is to the self-esteem. With a view to preserving the school population intact, dignity and all, the American Brake Shoe and Foundry Company, 230 Park Avenue, New York City, offers an improved type of nonslip safety metal tread said to be highly resistant to rust and acid corrosion and unaffected in its nonslip properties by water, oil or other slippery liquid substances.

A complete tread can be attached by bolts directly to steel or heavy wood stringers through the cast lugs at each end. The abrasive grains are carried

completely over the nose and concentrated at this vital slipping point to ensure greater safety and prevent wear.

Generalities

The National Conference on Visual Education and Film Exhibition is planning its largest and most comprehensive meeting June 20 to 23 at the Francis W. Parker School, Chicago. Educational authorities and industrial users of motion pictures are to participate in the conference this year and films of educational value are being selected. The conference will present clinic sessions on production and utilization problems with key people in the educational and industrial fields presenting their experiences, views and films in the four-day session. Interested persons are invited to write for free membership and details to the Director, National Conference on Visual Education and Film Exhibition, 1111 Armitage Avenue, Chicago. . . . A sound motion picture entitled "Anatomical Models, Their Production in America and Their Value in Visual Instruction," which demonstrates the relationship of the parts of the human body and explains the function of the various organs and structures, has just been released for school use. This is done by dissecting and demonstrating

an anatomical model on the screen. The film is designed to be of help to teachers, pupils and workers in the fields of health, biology, physiology and physical education. The film was produced by the Atlas Educational Film Company, Chicago, and sponsored by Denoyer-Geppert Company, 5235 Ravenswood Avenue, Chicago. Sixteen-mm. prints for use in sound projectors are available for use by schools. . . . It has been announced by Remington Rand, Inc., Buffalo, that Joseph Miller Jr., after fifteen years of service as secretary of the New York City board of education, has affiliated with its general school department. Mr. Miller was president of the National Association of Public School Business Officials for two successive terms and its vice president for three consecutive terms prior to that. . . . Carl Parsons has just been appointed educational representative in the Eastern States, according to an announcement by American Type Founders, Elizabeth, N. J. Mr. Parsons spent several years in school work as teacher, principal and superintendent. During the World War he was connected with the Bethlehem Ship Building Corporation in the department of statistics. Since 1927 he has represented several educational publishing companies in New England.



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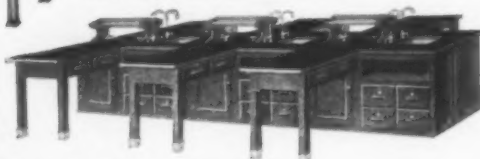
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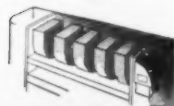


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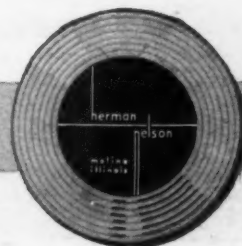
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THIS month it's Dean Edmonson of Michigan on federal aid. Next month Dean Ganders of Syracuse will take the floor. He is to compare what probably are the two most important reports ever made in this country on the problem of federal relations to education: the Hoover advisory committee's report of 1931 and the Roosevelt advisory committee's report of 1938.

IN CASE you are the only person in a gathering who hasn't been to Mexico, you can break in on the conversation with some information that some of the travelers don't know after reading I. W. Howerth's article to appear in the July issue. Professor Howerth of Colorado State College of Education has titled his manuscript "Children of the Army," which is the Mexican designation although somewhat of a misnomer. Soldiers' children and the children of their near relatives go to special schools where they may prepare for army life or any peaceful vocation. Mexican soldiers are expected not only to defend their country in time of war but also to promote its progress in time of peace.

THE school feeding section, presided over so competently by Dr. Mary deGarmo Bryan of Teachers College, next month will present articles by Mary Hemmersbaugh of Cleveland and Edwina F. Heitzeberg of St. Louis. The supervisor of the division of school lunchrooms in Cleveland will write on lunchroom aims and Miss Heitzeberg is to describe the cafeteria tea room that is a practical laboratory for the Hadley Vocational School.

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FINDING time for science is a major problem for any rural teacher because throughout the whole day she is "hearing" classes. How to incorporate elementary science into the country school program will be suggested in the July number by Lofton V. Burge, head of the department of rural education, State Normal School, Potsdam, N. Y.

YOU remember that charming article in April called "Fifth Grade Fantasy." An assistant editor, in laudable anxiety to prove that the fantasy actually materialized, inserted into Miss Balmer's manuscript a phrase placing the medieval project at Foxcroft School, Middleburg, Va. That was a false assumption. Although Miss Balmer teaches history at Foxcroft, the fifth grade project described was worked out at her former stamping grounds, Maumee Valley Country Day School, Toledo, Ohio.

"BRINGING Up a Sophomore" is a ticklish task unless scientifically handled, but Santa Barbara High School in California has worked out a system that it is proud to present. E. Louise Noyes, senior counselor, will tell next month how the plan makes both boys and girls better members of the high school community and better citizens.

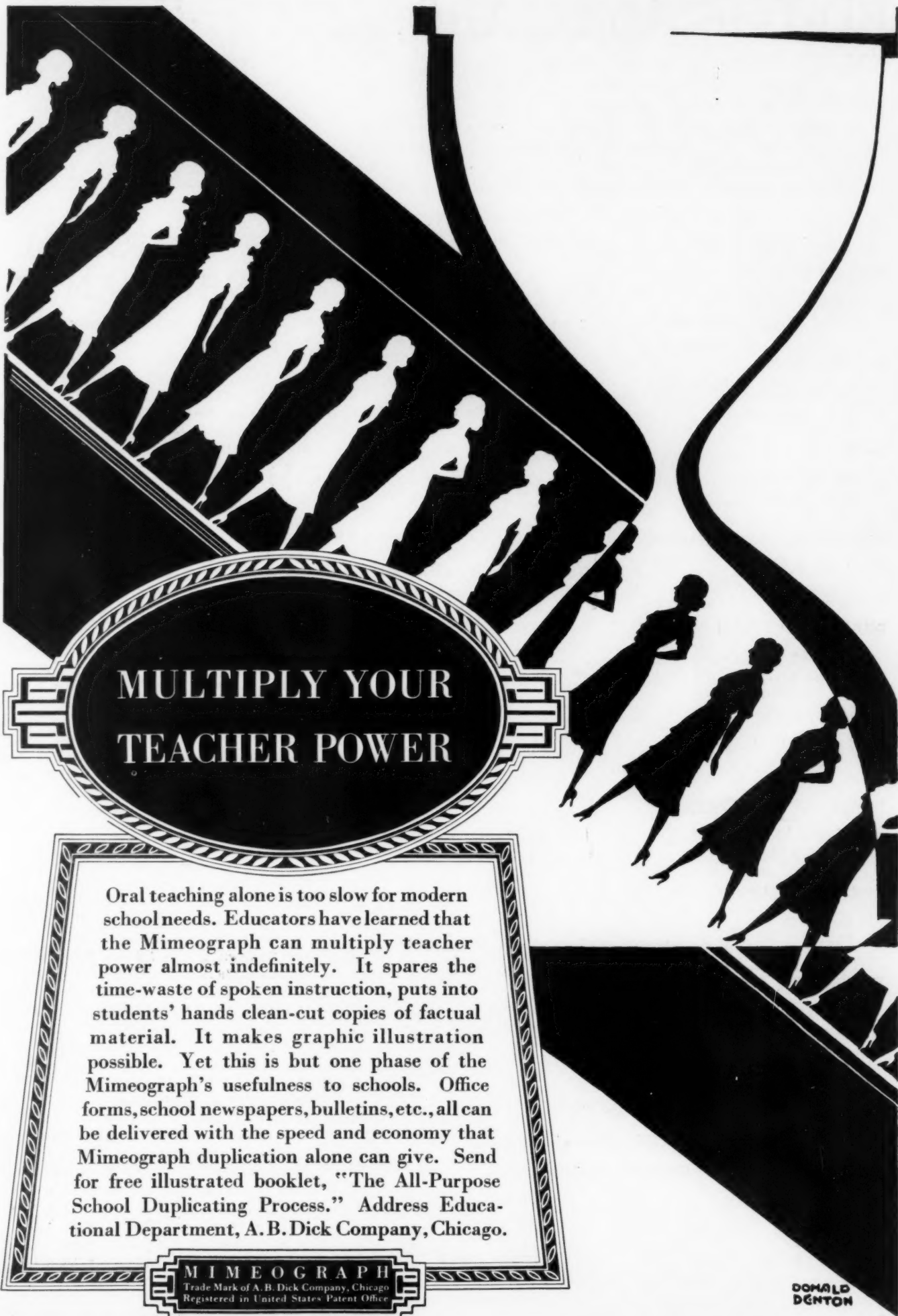
THE art supervisors have been busy putting color into classrooms for the last several issues. (See Miss Hayden's ideas on page 52, for example.) Next month a superintendent of buildings and grounds will speak a word for summer painting; in addition, he will discuss plastering and patching in the same brief article. He is R. G. Dempsey of the Colorado State College of Education.

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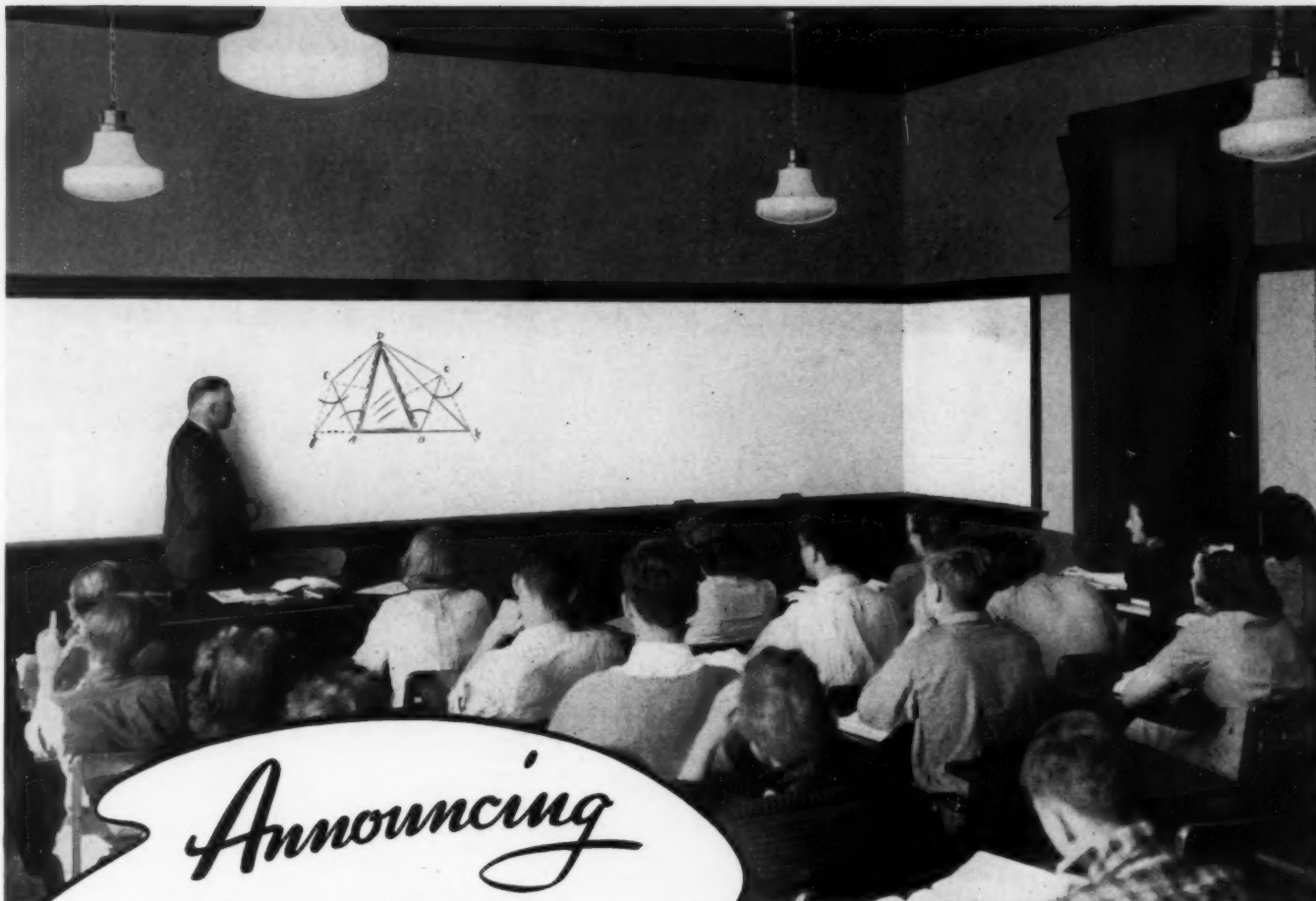
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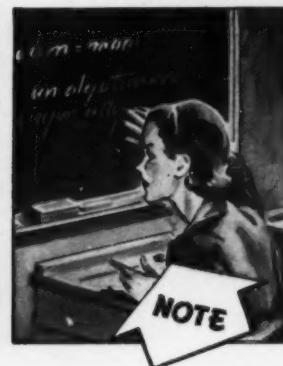
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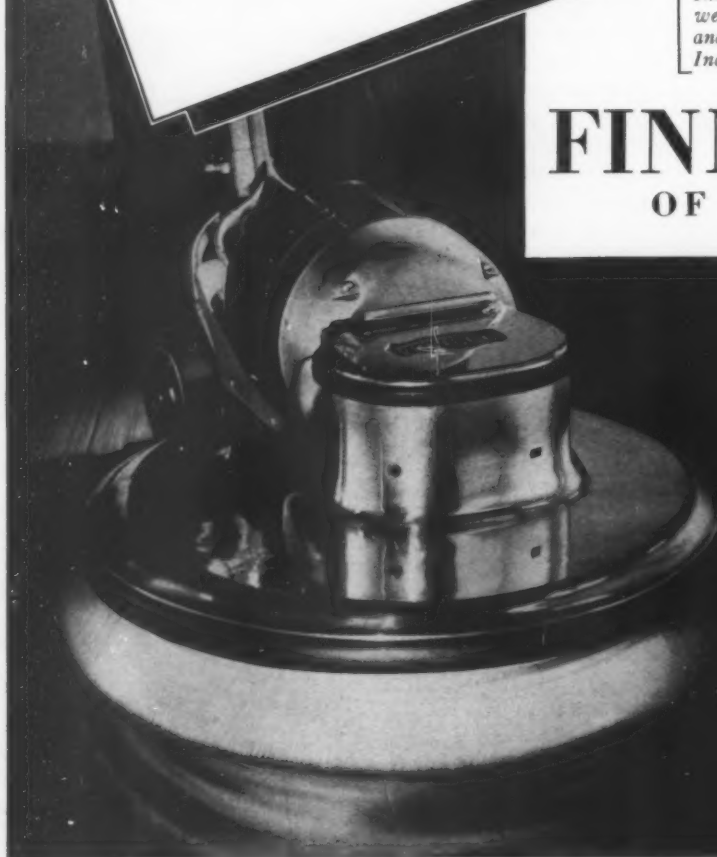
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LOOKING FORWARD

Fire Hazards

ACCORDING to statistics gathered by T. Alfred Fleming, chairman of the conservation division of the National Board of Fire Underwriters, two-thirds of the existing school plants are fire traps and there are, on the average, five school fires daily. The only fact that prevents greater loss of life is sheer luck since four-fifths of these fires occur when the building is not in use. Even with this distribution, considering 180 school days as the average per year, there are two fires every school day in our public and nonpublic schools.

In many of these cases well organized fire drills, free exits, complete equipment and the alertness of professional personnel to possible dangers keep school tragedies at a minimum. Occasionally the people are shocked by loss of child life as in the Collingwood School, Cleveland (176); Peabody, Massachusetts (22); Camden, South Carolina (77), and New London, Texas (456). In these instances basements, locked doors and careless mechanical work produced disaster.

School boards, superintendents, principals and even teachers resent the implication that their buildings are unsafe. They feel it to be a reflection upon their community. It is. Many claim that they cannot do anything about it anyway because it costs money to obtain protection. Others gently disarm criticism by claiming fireproof buildings. For this belief architects and engineers are quite generally to blame. If a building were classified, in terms of its time-factor of safety, as a fire-resistant instead of a fireproof building, the educator might be more realistic about the question. Regardless of attitude, annoyance or emotion, the fact remains that there is annually a total of 1825 school fires; these facts cannot be laughed away.

After years of careful study the National Board of Fire Underwriters has come to the conclusion that, in addition to constructing fire-resistant buildings, providing clean panicproof corridors and unlocked exits and installing fire extinguishers, the best safeguard is the installation of automatic sprinkler systems in every building. When complete installation is not feasible, at least all shops, laboratories, libraries, auditoriums, cafeterias, offices and storerooms should be so protected.

The cost of installation will within a few years be more than paid for by the actual decrease in the cost of insurance premiums. The summer vacation is an excellent time to do this work and to reduce perceptibly the hazards in two-thirds of our existing buildings. The schools may not always be as lucky as in the past.

The Carnegie Report

THE report of the Carnegie Foundation for the Advancement of Teaching (Bulletin 29) marks the culmination of ten years of careful appraisal of a cross section of higher education and indicates some of the weaknesses of the current system of "credit-education" that dominates so completely our college and university methodology. Although the report was confined to the examination of some 55,000 Pennsylvania students, it is reasonably safe to assume that these conditions can be duplicated in other areas.

The results of credit-education indicate that many students actually lose ground during their college courses and know less at the end than at entrance. In mathematics, particularly, the average student in 20 of the 33 colleges studied had slipped backward.

In many respects one of the most disconcerting findings of the research is the result of the tests applied to high school seniors and college seniors preparing to teach. The report comments on this condition as follows: "In both tests the teachers' average was below the total score for the entire group and was below all other group averages except those of the business, art, agriculture and secretarial candidates. The only consolation to be drawn from these findings appears in the fact that among the prospective teachers graduating from arts colleges and technical schools the male contingent taken alone ranks high. In both examinations the men constituting about one-third of the arts college group scored higher than any other large occupational group except, in the second test, the engineers."

While many of these findings merely confirmed observations and experiences of many teachers in higher education, a highly significant social implication was the discovery that 3000 high school pupils, unable

to attend college for economic reasons, were actually more capable on the average than the 4000 students who were able to continue their formal education. The report does not indicate how many capable high school pupils were forced to leave before graduation from the twelfth grade because of economic inability to continue.

The result of this unusually well conducted research should be to accelerate change from the conventional credit-education system of learning to a much broader basis for appraising the results of training. Large emphasis must be placed on the learning process as a whole and less on segmentation into minute small special course areas. The survey indicates a need for the careful exploration of general educational tests that will stress related knowledge and power.

A second result should be greater emphasis upon one of the highly neglected areas in the so-called equalization of opportunity concept—the removal of the bar of economic inequality from capable pupils by providing through federal and state sources scholarships that will permit these higher abilities to participate in existing educational opportunities. While individual institutions offer numerous grants and scholarships, most of these are now on the graduate level and fail to reach a group in which such aid is also vital.

Even the impressive total of these institutional scholarships is woefully inadequate to meet the existing economic inequality. The findings strengthen the recommendation of the President's Advisory Committee on Education that the federal government take a major share in eliminating economic inequalities of educational opportunity.

Beauty and the School

EVEN casual study of the public school plant in the United States leaves the observer with the definite impression that the average school has succeeded in divorcing beauty from education. The typical building is drab and forbidding, dingy and dreary and free of the atmosphere of high creative expression that should be an integral part of the educational process. This condition is also carried to the school grounds where bare ground, unsightly refuse heaps and general absence of even elementary landscaping detract further from an already unsatisfactory architectural nonentity.

The exceptions to this generalization exist in areas in which years of intelligent leadership and preaching of the doctrine of beauty have created a definite community attitude toward the school and its relation to the finer values of life.

The general excuse for this status is either reference to the unusual expense of providing for trees, shrubs, flowers, pictures and murals or the fact that the people desire only the practical and sensible. Since as much

beautification exists in certain small and less favored centers as in the larger concentrations of population, this answer does not appear to be satisfactory or a complete explanation. It is possible to beautify both grounds and buildings without an excessive outlay of money. It is much more a question of recognition and acceptance of beauty in its fundamental contribution to a richer life. Whether a school plant makes an effective contribution to the enrichment of community life depends upon more than mere outlays of money.

Technical reproduction processes have made the acquisition of copies of the world's finest paintings relatively inexpensive. The generous use of paint, especially bright, cheery colors, and of plain soap or other cleaning material and water can do much to remove internal dinginess. Plants, shrubs and trees are priced so low that there is little real excuse for their absence.

Until recently it was prohibitive for the typical school to provide for internal decoration through the use of murals. Willingness to cooperate with the Works Progress Administration by furnishing materials for artists working on government subsidy now brings this highly effective form of expression within the reach of practically all districts. There is an unusual amount of talent among these subsidized artists judging by the productions already integrated in many of our public buildings. As a service it is readily and easily available upon application in most areas of this country. Every community has some valuable traditions or significant history that deserves to be perpetuated in its schools.

One of the most effective means of increasing the influence of the public school is through improving its sensory effect. Many problems and conflicts, particularly of the neighborhood type, are much easier of progressive solution if the physical plant can be made more meaningful to the people. More serious consideration of the problem of beautification has been long overdue.

"All the Children"

THE latest report of the New York City schools recently released by Supt. Harold G. Campbell is worthy of serious study by the teaching profession. It marks a progressive and distinctly forward-looking change in the policies and practices of public education in our largest city school district that indicates a new type of educational leadership. In summary, the educational objectives may be considered as:

"1. Each child needs to be considered as a real human being who has problems as real and important as are the problems of any adult.

"2. Each child needs to be considered as a social being, living in a continuously progressive society.

"3. Each child differs from every other child. Each is a unique human being. Children differ in personality

and in social development. They differ in ability, in richness of experience, in interests, in needs and in opportunities.

"4. The school is a social agency in the most strategic position to lead, guide and influence social living."

These purposes are still largely in the objective and not the achievement stage. However, the fact that they are promulgated as generalized and long-time objectives indicates a distinct trend toward their ultimate achievement that cannot help but affect the entire school system. The educational leaders of the New York City schools deserve commendation for developing a rational policy of progressive education.

Questions and Answers: II

THE minority report of T. J. Thomas in the report of the Advisory Committee on Education has interested many readers. In brief, this dissenting opinion hinged around a question of policy in procedure. Contrary to scattered impressions, the dissenter did not question the conditions of educational inequality or the need. He raised the moot point that the first step in equalization is the need for reorganization within the individual states and that not until these changes had taken place could the states logically ask for federal aid.

This attitude is not a new one. It is held by many realistically minded educators. While careful study of educational conditions and economic capacity within the several states shows glaring inequalities, it is also just as obvious that the reorganization of antiquated local and school governments, the overhauling of the poorly balanced tax systems and the elimination of extravagant tax administration would reduce these inequalities greatly. Many have rather continuously urged that this is the primary problem.

On the other hand, it is just as obvious that after all possible internal improvements have been made there still exists in the Southeast and Southwest a great fundamental economic disparity that cannot be eliminated at least within this generation. Many economists and agriculturists are dubious as to whether it will ever be possible to do so. This fact has resulted in the development of strong support for immediate large and heavy subventions by the federal government to the states without the establishment of any controls to determine whether the money is properly used. The extreme attitude is more emotional than rational. Existing educational inequalities have not blossomed overnight. They have been in effect for much more than a generation. Hence the plea that full and complete equalization through federal aid must become an immediate fact, regardless of the possibility of improvement, appears to be a little extreme. However, consistent and heavy propaganda over a period of more

than a decade for large federal subventions has beclouded this issue in the minds of many educators and laymen alike.

Confronted by these strong extreme views the committee report avoids the dangers of both. To insist that the state reform first might have had bad psychologic results and would have been resented as unwarranted dictation by the federal government. To accede to the wishes of the unrestricted large fund enthusiasts would have resulted, if enacted, in retarding rather than accelerating state reorganization. The projected plan, which definitely provides for improvement through stimulation in specific areas, in addition to recommending a generous sum for equalization for the next six years, is a sound moderate proposal.

The minority report is certainly justified in terms of existing knowledge but the more moderate recommendation of the committee is probably a sounder solution in terms of the totality of conditions.

The Roslyn Survey

THE schools of Roslyn, New York, have been operating a progressive system of elementary education since 1927. Whether owing to an inadequate program of interpretation or low receptivity to new ideas on the part of a large portion of the adult education, a distinct protest movement developed last year. This reaction against progressive methodology finally culminated in a petition to the North Hemstead board of education to modify the current practice by changing to "a system of education in which the skills of the tool subjects—reading, writing, arithmetic, spelling and history—through a minimum requirement for each grade are thoroughly mastered." The board of education wisely met this objection by authorizing an impartial appraisal by the state educational authority. This task was assigned to J. Cayce Morrison, assistant commissioner, and a staff of competent assistants.

The results of this appraisal have been published in readable form by the board of education and the findings in general are favorable to the Roslyn system of elementary education. The survey concluded that the Roslyn attendance was better than the median of all village school systems; that marked progress had been made in reducing overageness; that a friendly and cooperative spirit existed between teachers and pupils; that the school was actually achieving its function as a democratic institution and in its attempts toward cultural integration, and that the children were learning well in terms of their native ability. There were also a number of suggestions for study and for improvement. The survey is an interesting document that deserves wide circulation and reading.

The Editor



The Theater Is Not Dead

GEORGE E. MURPHY

WHEN the cry, "The theater is dead! Long live the movie!" arose in the country, the people in the state of Washington were not greatly concerned. Most of them had never seen good theater, for plays were rarely presented to any but the people of the cities.

Although many city people enjoyed the recreation the theater afforded and many of them had come to appreciate the cultural contribution that it made, few suspected that one day it would serve as a handmaiden to education.

Most of the people came near to forgetting the theater entirely. In Seattle a small group of theater loyalists headed by Mr. and Mrs. Burton James remembered. And remembering, they pondered.

Did the movie contribute to education and culture the same depth of glamor, beauty and richness that the theater had given? Was there not a distinct difference between the culture of the movie and that of the theater? Was there not an advantage in realizing the contributions of each? Why should not the theater be put on wheels and taken

to the people all about the state? Why couldn't school children see presented in their schools the plays that they read in their classes?

These loyalists resolved that something should be done about it. By virtue of their persistent efforts, the Washington State Theatre was founded through the cooperation of the state department of education and the Repertory Playhouse, civic theater of Seattle. A grant from the Humanities Division of the Rockefeller Foundation provided for an initial three-year experimental period.

Both the state department and the Repertory people were confident that the project could and would be a success. The theory and practice on which the state theater had been founded already had been tested, not only in Seattle but also in Tacoma and Everett, where the Repertory players had gone on a trial tour in 1935. The growing interest of administrators, teachers and pupils in and about Seattle convinced the directors that appreciation of the theater was not dead. The task of

awakening an active statewide interest in the spoken drama was theirs.

They wrote letters to school administrators. These letters explained the project and attempted to arouse enthusiasm and active cooperation among overworked administrators. If the schools in any area of the state desired a performance, the directors explained, the theater would come provided the schools would attempt to assemble an audience of approximately 1,000 as an insurance against too great a financial loss.

But the directors knew that in sparsely settled areas, where the theater probably would be most welcome, audiences of this size could not be assembled. So the letters explained carefully that if such areas wished, the theater would come provided the schools assembled as large an audience as possible.

On this basis thirty areas outside Seattle invited the theater to come. In some instances the audiences numbered less than 400. In each area the school with the best theatrical facilities was chosen for the production.



Above: A scene from Shakespeare's "Comedy of Errors," which was an instantaneous success. Below appears a scene from "No More Frontier."

Then came the task of selecting a play best suited to display the art of the theater and yet one of a type that would arouse a lasting interest, appreciation and enthusiasm. Experience dictated policy. In 1931 Shakespeare's "Romeo and Juliet" had been given in three matinee performances for as many Seattle high school groups. The results had been a revelation not only in the eagerness with which the pupils thronged the performances but also in the interest and response these pupils evinced in the classroom discussion of the theater and drama. Later "A Midsummer Night's Dream" had enjoyed even greater success.

After a careful survey of teacher and pupil interest, Shakespeare's

"Comedy of Errors" went into rehearsal with a cast of actors selected from the group at the Repertory Playhouse. Although the Repertory Playhouse and the State Theatre are distinct entities, yet players from the Repertory group make up the casts for the State Theatre productions. Later, the directors fully expect to produce a play written and acted by high school pupils for high school pupils.

With September came the actual promotional activities. A committee of teachers working in conjunction with the directors prepared suggestions for the classroom study of the play. These were mimeographed and sent to the schools of the state so that pupil appreciation for the

play might be intensified through a deeper understanding. The payment of a 25-cent admission was required of pupils because in no other way could the State Theatre be self-sustaining. The sale of tickets usually was accomplished by teachers and pupils, aided in no small degree by the personal appearance of one of the company acting in the capacity of advance agent.

Matinee performances were deemed advisable for pupils. Of course, the critics could say that the pupils attended the play simply to get out of school. Doubtless that was a potent factor in drawing pupil crowds, yet it is surprising how in such a short time pupils could have been interested in seeing something that was unknown to them or "just another movie." Experience with Seattle pupils showed that many of





Interest in the plays was widespread. A group of pupils chartered a special train to take them to a state theater performance at Pullman, Wash.

them had cultivated a lasting appreciation for that which is good in the theater through an original desire "to get out of school."

Although not publicized to any great extent, evening performances were given for the benefit of adults wherever the plays were presented. The added revenue aided in making possible the low pupil rate.

Then, too, the culture of the spoken drama was made available for adults, many of whom saw legitimate theater for the first time in their lives. At present, adults and pupils see the same productions. In the future, the directors plan to produce for adult audiences great modern and classic plays not expressly suitable for young people. These productions will be gleaned from the finest plays of all ages.

The adult interest, judged on the basis of attendance at the evening performances of the first season, was not startling, but the people who did come carried their enthusiasm for the State Theatre productions to friends and neighbors who, in turn, will add to the size of the audience.

The "Comedy of Errors" met with phenomenal success everywhere. The play was a "natural." It had everything: color, farcical humor, excitement and well-timed suspense. The boys liked its slapstick comedy and lusty humor. Girls admired

the beauty of the set and costumes while they thrilled to the romance and the sentiment of the play. But the directors were not satisfied. They wanted to hear the criticisms of teachers and pupils. They wanted to know how they could improve their service to the schools.

So the directors instituted a survey through which they learned that the pupils of the state were anxious to have another play; only this time they wanted "something modern." This was a disconcerting order to the directors who were of the opinion that an appreciation and understanding of the modern realistic drama are based upon an appreciation and understanding of the classic and romantic forms. It was against their better judgment that they started work on Jennings' "No More Frontier" for the spring tour.

Just as the directors predicted, "No More Frontier" did not approximate in any degree the success of the "Comedy of Errors." Another survey showed that the problem presented in the modern play had been realistic only to adults. Since the pupils did not understand what the play was about, they naturally considered it dull.

With the State Theatre dedicated, however, to a policy of growth in service, this criticism of its latest effort was turned to capital in the

selection of plays for coming seasons. Because pupils and teachers felt that one of the great contributions of the State Theatre was the development of taste for the good things of drama, the directors reasoned that they should attempt to arouse through future productions an interest in the really good music and dance associated with good theater.

The correlation of State Theatre performances with actual school study constitutes one of its most important aspects. This correlation, which is unique among the English-speaking nations of the world, is brought about, first, through selection of some of the plays already in school curriculums. Then follows a classroom study of the play to be presented. This study is facilitated by the mimeographed suggestions sent to the teachers and frequently takes the pupils into a consideration of the history of the drama, biographies of great actors, acting techniques and play production.

But the pupils are not satisfied with study alone. Frequently, they become creative in that they write original dramas and produce them. Through seeing the dramatization of a classic that they felt was only to be read, pupils realize with a pleasant shock that plays are written to be acted on a stage and that the characters in the plays are like actual people whom they see every day. After the performances, the pupils turn critics—and good ones they make! Primarily, however, the emphasis is put on teaching the pupil literary and dramatic appreciation that comes only from being a member of an audience.

The Washington State Theatre takes a long forward look in its plans. It looks to the day when it will present plays to match the interests of elementary school pupils, secondary school pupils and adults. It looks to the day when it may foster the writing of new romantic literature intended expressly for pupils. It looks to the day when plays characteristic of the lives of the people in the state of Washington will be produced. The directors believe that soon all the states will sponsor "theaters on wheels," so that the heritage of the theater may be brought to the people of America.

Service *v.* Control in Auditing

DOES the power to audit school accounts necessarily mean the power to control school policies?

Educational authorities probably would not agree on the answer to this question. Their differences in point of view may be explained in terms of experience. There are states in which those who have exercised the auditing function have either controlled or sought to control at least some of the educational policies. Naturally, one who has had experience with such control would be likely to assume that auditing does give control of policies.

Most educators would probably take the position that auditing is primarily a service function to be rendered by the government in an endeavor to see that all public funds are handled and used for the benefit of the public rather than for the benefit of any individual or group. However, they recognize that most individuals and agencies constantly, and often unconsciously, seek to aggrandize the cause or service with which they are connected and that those charged with auditing functions are likely to begin to exercise some definite control over educational policies unless proper safeguards are provided.

The entire question should be approached from the point of view of determining safeguards needed to assure, first, that all funds will be expended for the benefit of the public and, second, that the determination of educational policies will be left to the authorities specifically chosen to represent the public in that field. The interests of auditing and of educational agencies should be determined definitely by these criteria. This problem should be considered as only one aspect of the general problem of delineation of government service.

As far as can be determined, no authority on auditing assumes or implies control of policies in his definition or in his statement of purpose. The matter, however, cannot be disposed of as easily as might be indi-

EDGAR L. MORPHET

The first of a series of two articles on auditing by the director of administration and finance of the Florida State Department of Public Instruction. The second will follow in July

cated by this statement. It merits further analysis in order that the real issues may be brought to light.

The fundamental purpose of the auditing service for schools is to ascertain whether the public funds expended inure to the benefit of the public rather than to the benefit of some other party. Whether a given educational expenditure is wise or unwise, from the standpoint of educational benefits, is a matter that should be determined by educational authorities in accordance with the law investing them with this responsibility.

The fact should be faced frankly, however, that, in spite of definitions and statements of purposes, the auditing service does exert an influence upon certain types of policies in education as well as in business. It is frankly intended to do so and could not be justified if it failed to exert such influences; those may be classed as desirable or mechanical controls. Certain beneficial changes in policies and procedures may often be made on the basis of financial conditions portrayed by the audit.

Some of the desirable influences of the auditing service upon educational policy are listed below:

1. Auditing is based on the assumption that records of all financial transactions will be preserved. If such records were not preserved, an audit obviously would be impossible or meaningless. This assumption that

lies back of auditing makes it imperative that the board of education, whose accounts are to be audited, adopt a policy of preserving records. It is so universally recognized that records of all financial transactions must be preserved for a proper length of time that any organization failing to do so is automatically subject to suspicion.

2. Auditing assumes that some plan for recording financial transactions will be used. Auditing is possible without any plan for recording, but it is a much more cumbersome and difficult task than when a systematic plan is followed. The need for such a plan for keeping accounts is so commonly accepted that any board failing to have such a plan is recognized as unbusinesslike. Auditing thus again requires that the board employ competent bookkeeping or clerical assistance. This would not be necessary if accounts were not kept in the customary detail.

3. Auditing assumes that accounts will be accurately kept. Errors will be made, naturally, but these errors are expected to be the exception rather than the rule. If errors are too common and accounts obviously have been carelessly kept, the board will be subject to criticism. In this respect also, auditing requires the board to fix a policy making the real facts regarding the financial condition and status available at any time to the board, as well as to others, so that defalcations may be avoided.

4. It is assumed that all funds will be honestly expended for the purposes intended. Auditing is intended to prevent or discover fraud and, in so doing, results in fixing a most important and fundamental policy.

5. Auditing reports giving the financial status of school systems are, when completed, customarily open to public inspection. Back of this practice is the assumption that the facts regarding the financial conditions of schools should be available to the public.

6. Public funds are expected to be expended for the purposes author-

ized by law. When the law expressly prohibits the expenditure of funds for certain functions or expressly states the manner in which funds may not be expended, the auditing service is expected to determine whether or not funds have been spent contrary to legal provisions. The auditing service determines whether or not the law has been observed and, by bringing to light illegal practices, makes it more probable that the board will adopt the policy of observing the provisions of the law. When the law merely states a principle, such as charging the board with the responsibility of expending funds "for public school purposes," the educational authorities, rather than the auditing authorities, should prescribe criteria to be used in determining whether expenditures are proper.

7. If the budget is to be of significance, some agency should have the responsibility of determining whether it has been observed as originally adopted or as amended. Although this function has not been assigned to the auditing service in all cases,

there is good reason for believing that it should be. The board would thus be free to determine its policies in setting up or amending the budget but it would be restricted to the policy of limiting expenditures to the budget, a practice that is becoming recognized as highly desirable.

Law or custom, rather than auditing, provides the desirable or mechanical controls that determine policies. Usually the assumptions on which these controls are based are incorporated in the law. Regardless of the law, the practices and principles of auditing have become so firmly entrenched in the American system that the controls enumerated here are at least implied whenever an audit is made. No one would deny the desirability of these mechanical controls or contend that such desirable controls should not be provided by auditing.*

*The author wishes to acknowledge the assistance of Bryan Willis, former state auditor of Florida, and R. L. Johns, director of administration and finance, Alabama State Department of Education, in defining functions and delimiting criteria used here.

Orienting Clerical Workers

CHARLES E. LEAVITT

WITH the return of a more normal industrial activity a year or more ago, the sudden demand for trained office workers exceeded the supply and many inexperienced workers were drafted from the ranks of recent graduates of secondary schools and business colleges.

During the course of hiring over the desk, a practice commonly followed, commercial supervisors and office managers found an apparent discrepancy between the work produced by the newcomers and the school records that had been consulted at the time of employment.

When this problem first became apparent the question of adequate preparation was raised, but more recently it has been recognized that there are two major weaknesses: (1) employment of the casual applicant and (2) the gap between the arti-

cial situation found in the schoolroom and the competitive office work in which 100 per cent efficiency is expected and not 60 to 90 per cent efficiency, as is satisfactory in the schools.

Personnel directors, therefore, have found it necessary to ease the strain on the recent graduate and a noticeable improvement is usually apparent after a four to six weeks' period of adjustment.

During the last three years many employers have made an organized attempt to eliminate the "floater" and indifferent worker by requiring concrete data of the secondary school and other employment agencies. The mortality of the young worker has been appreciably lowered.

Industry may need to answer one question before any workable plan is devised. Does it want specialized mechanical skill or does it want higher selectivity based upon native

ability, personality and possibility of future advancement?

Examples of three general approaches in the Detroit area are:

1. The Ford Apprentice School and other trade schools and the agencies cooperating under apprenticeship plans have done much for boys in the skilled trades, but little has been done by industry in orientation and training of clerks.

2. Since June, 1936, the latter course has been followed by one of Detroit's large public utilities companies in its supervisor's training courses. Although too little time has elapsed to evaluate the results fairly, it seems a vast improvement over the more or less trial-and-error method formerly used in the training and selection of its supervisors.

3. Many employers stress native ability and personality and start all newcomers as mail clerks and filing clerks, later advancing the more outstanding workers. This plan has worked most satisfactorily with at least one large industrial office.

No one type seems best suited for all types of work within a single organization, but the following generalization, based on information gathered through personal contact with personnel directors and commercial supervisors, is submitted:

1. Closer cooperation between employers and schools. To support recommendations, schools should have data on tests and extracurricular activities and should have a fairly intimate knowledge of the family and social background to support recommendations.

2. Secondary schools should give general background and the required amount of basic mechanical skills, but specialized skills peculiar to a particular industry or type of work could be more profitably supplied by the employer to a selected group.

3. When the inexperienced worker is employed, an adjustment period of at least one month could be well recommended for the employer. Native ability is not a perishable commodity and if the employee has been carefully chosen he should adjust himself within such period to his new environment. Encouragement through suggestion under present personnel practices will salvage many young employees.

The Price of Federal Aid

J. B. EDMONSON

THE representatives of public education who assisted in drafting the Senate bill known as the Harrison-Thomas Bill apparently have decided that a large degree of federal control of education is the price that must be paid for federal aid.

This new bill, which is the substitute for the better known Harrison-Fletcher Bill, is supposed to embody the recommendations of the President's Advisory Committee on Education. The sincerity of the interest of these representatives in public education is not questioned and the proposed bill may be the best that can be obtained at this time when federal direction of many state activities appears to be on the increase. The bill, however, should be examined critically by those who are concerned with a long-term view of public education.

The avowed objective of the legislation is stated in disarming terms. It reads: "For the purpose of lessening inequalities of opportunity for elementary and secondary education among states and within states. . ."

Of this worthy objective I have no criticism. However, a critical analysis of the measure seems to justify the conclusion that this avowed objective is not the only purpose of the legislation. The additional objective that seems inherent in the measure might be stated as follows: "To require the states to reorganize their educational practices and policies in terms of the specific provisions of the proposed federal legislation and to provide a means whereby the federal government might determine more completely the program of education within the several states, in the interests of efficiency and greater equality of educational opportunity as interpreted by officials of the federal government."

In support of the opinion that this suggested additional objective is to

Dean Edmonson of the school of education, University of Michigan, defends the principles set forth by the Educational Policies Commission upholding the tradition of state and local control in school administration, even at the cost of immediate federal aid as proposed in the new Senate bill, supposed to embody the views of the President's Advisory Committee on Education

be found in the bill, I would invite a review of section 2, which opens with the statement: "A state plan for the improvement of public elementary and secondary schools must provide. . . ." This mandatory statement is followed by a number of specific requirements that a state must satisfy as a condition for receiving the proposed federal aid. Some of the requirements would necessitate changes in the policies in many of the states.

I have little criticism to offer of the requirements except that they represent a type of federal domination of education within the states that is not in accord with the prevailing opinions of the teaching profession as expressed in resolutions and reports. It is also suggested that the possibilities of federal control of state education are inherent in the sections relating to state departments of education, especially the provision designed to eliminate political considerations in the selection of the personnel of the state educational office. Again it is my belief that this requirement is highly desirable but I view with concern the proposal that the federal government take the responsibility for enforcing such a policy on the states.

There are other places in the bill that propose similar restrictions on freedom of the states. It seems, therefore, that careful consideration should be given to the question: Are we willing to give up the traditional right of a state to develop its own peculiar educational structure and policies as the price for federal aid?

In section 3 the availability of federal aid is restricted to states "having

an approved plan." In an earlier section of the bill it appears that state plans must have the approval of the U. S. commissioner of education, an officer appointed by the President. This proposal of approval smacks of Smith-Hughes policies, which are severely criticized in the report of the President's Advisory Committee on Education. It is true that the bill contains a section of guarantees designed to safeguard state and local initiative and responsibility in matters of education, but it is instructive to note that the U. S. commissioner of education, as the representative of the federal government, is given a large amount of discretionary power under the proposed legislation.

It is also instructive to find that the commissioner of education is mentioned more than 70 times in the proposed measure, which is a disturbing number of references in a bill that is supposed to provide federal aid without federal control. In some of these instances the commissioner is given a grant of power that could by interpretation be stretched to a point where actual control of general education from Washington would become as great as the control that now exists in vocational education. The case against this type of control is fully set forth in the report of the President's Advisory Committee on Education.

In section 3 of the bill brief descriptions of some of the activities and services that "may" be supported by the proposed federal funds are given. These descriptions may be necessary in order to obtain congressional support for the measure and it would

appear that the special interests of many groups have been provided for in the descriptions. In general, the descriptions relate to the possibility of using the federal funds for the support of newer educational enterprises and for the financing of services to pupils in nonpublic schools. I am of the opinion that these descriptions are included for the additional reason of giving the federal officials a basis for urging changes and eventually forcing changes in the educational programs of the states.

If such a use of the descriptions is not desired by the supporters of the measure, why not delete all of section 3 except the first paragraph? This would leave the states ample authority to use the proposed funds for the current operating and maintenance expenses of public elementary and secondary schools and would not force some of the states to consider certain of the controversial issues that have been "dragged in" under section 3.

In a consideration of the Harrison-Thomas Bill one is reminded of the

pronouncements made by the Educational Policies Commission in a recent publication. A part of this statement reads as follows:

"No distribution of funds should depend upon the exercise of discretionary authority by any officers of the federal government.

"It is sound policy for the federal government to contribute to the support of education within the several states without seeking to control or to administer the schools or to determine the curriculums of the schools or the methods of teaching employed in them. Any good that might come from federal support would be more than outweighed by the evil that would arise were control and administration to be vested in the central government as the price to be paid for support.

"The American tradition of state and local control in the administration of schools is sound. Decentralization in the administration of education makes possible experimentation. It enables us to adapt our schools to the needs of the people in

greatly varying areas; it denies to any group or party temporarily in control in the central government the opportunity through propaganda to regiment the thinking of the American people. Even more significantly, the local control and administration of education have made possible the acceptance of responsibility by all of our citizens for the maintenance and development of our system of public education."

It is my belief that the Harrison-Thomas Bill violates the principles set forth in the foregoing statement from the report of the Educational Policies Commission. It may be, however, that the urgency of federal aid for many of the states is so great that these principles must be sacrificed in the interests of greater equality of educational opportunity. When one considers the desperate financial need of many areas and reviews the mounting evidence of inefficiency in the structure of education in some states, the prospect of marked improvement that might follow under direction from Washington is inviting.

In all probability an aggressive commissioner of education, possessed of high professional ideals, could bring about a great increase in the efficiency of public education through the controls inherent in the Harrison-Thomas Bill. If, however, we desire to defend the traditional freedom of state and local responsibility and initiative, the Harrison-Thomas Bill should be amended to provide a grant of federal funds without so many strings attached. Is this possible or have certain pressure groups decided to use the federal aid proposal as a way of introducing their pet policies and projects into the schools of the several states?

The bill raises the issue of federal control, which should be faced frankly and courageously by the members of the teaching profession. The question before our profession is: "How much federal control and direction of education must be accepted as the price of federal aid for public schools?" In my opinion the principles set forth by the Educational Policies Commission are still valid and are worth defending even at the cost of immediate aid from the federal government.

Brush Work on Basement Walls



The drab prison atmosphere of this basement area, which so long depressed pupils and teachers in this public school at Roslyn, Long Island, N. Y., has vanished. The pupils themselves were turned loose on the offending surfaces, and the result was walls in gay colors and design.

Come Up and See Us— Thursday at 2 O'clock

ROLLAND H. UPTON

FOR many years public schools have been asking parents to "come up and see us sometime—anytime." These invitations have not been universally accepted and school people often wonder what is wrong with the technic they have been using.

"Parents are urged to visit the schools," reads a widely used report card. This statement, like most of its kind, does not say when parents are urged to visit. Presumably one time is as good as another. Most parents have the good sense not to accept such an invitation and most school people are jolly well glad of it. Parents ordinarily are not wanted in the classroom and the fact may as well be admitted. The invitation, obviously insincere, serves merely as testimony that the schools are not ashamed of the job they are doing.

What happens on the rare occasions when someone's mother drops into the classroom? If the class is well organized and the children properly trained, some youngster will place a chair for the visitor and perhaps offer her a copy of the textbook the group is using. Let us assume that the lady sits down. (Parents have been known to bustle up to the teacher and start a conversation, but this is a nice lady.)

When Visitors Come

The class is immediately conscious of the presence of an audience. Some will be challenged to furnish entertainment; others will become self-conscious. Few pupils will behave as though nothing had happened. If the visiting parent's offspring is an adolescent boy he will become red behind the ears and wish that "Ma wasn't so darned public spirited." The teacher will feel that her work

is being critically evaluated and her actions will be the adult equivalent of those of the pupil she resembles most, for teachers, contrary to some opinions, are individuals too.

And what of the visitor? She will settle into her chair, only slightly conscious of the change her presence in the room has brought about and expect to see modern education at its best.

Recently ten teachers selected at random were asked the following question: "Do you enjoy having a parent make an unannounced visit

Proud parents do not accept vague invitations to visit classrooms, but if they are invited for a definite time the response is likely to be overwhelming, says this author, who is district superintendent of Buena Park, Calif.

to your classroom?" The following replies are typical.

"Of course not. It disturbs the class."

"No parent ever walks into a normal classroom situation. Show-offish pupils are stimulated and introverts glue their eyes to the desks."

"They always come at the wrong time."

"I like to meet them anytime except during class hours."

"Deliver me!"

A bad attitude, you say? Try this question on your own instructors, Mr. Administrator, and see what sort of answers you get. At least you will discover whether or not your teachers are afraid to tell you the truth.

Visits to classrooms do not greatly differ from visits to homes. Any housewife enjoys company, provided she is not in the process of scrubbing the kitchen floor. There are times when even the best friends are in the way. The knowledge of this fact probably keeps many parents from intruding in classrooms despite repeated invitations from school authorities.

There are many types of invitations. The two extremes might be classed as no. 4 common and no. A1. Invitation no. 4 common sounds something like this: "Drop by and visit us sometime. We're always home." Invitation no. A1 is more to the point: "Can you come over for dinner next Thursday evening at 7? We're having some friends I know you'll enjoy meeting."

Merely a Gesture

Invitation no. 4 common is not really an invitation, and proud people do not accept it. They recognize it for what it is—a gesture. Invitation no. A1 sounds more sincere and probably will be accepted unless the person extending it uses the wrong kind of bath soap or forgets to gargle twice a day.

School administrators who succeed in getting parents to visit school use invitation no. A1. Here are some typical examples:

"You are cordially invited to come to school next Friday evening. Between 7 and 8 o'clock all classrooms will be open and exhibits of children's work will be on display. Following the exhibit an operetta will be presented in the auditorium."

"The second grade invites you to come to its program at 2 o'clock next Wednesday afternoon."

"I wonder if you could find time to come to school tomorrow afternoon at 1 o'clock? Your son Wilbur is upholding the affirmative side of

the question, 'Resolved, That the Supreme Court Should Be Enlarged.'

Parents accept such invitations and many occasions can be found for extending them. They will not come out in any number in response to invitation no. 4 common. A speaker in talking to a fathers' night group at a P.T.A. meeting recently said, "I will not embarrass you by asking for a show of hands, but how many of you fathers have visited a classroom since school opened last fall?"

There was a slight giggle in the audience as there always is when someone is being reproved and the fathers assembled did their best to look guilty but the effort was not successful. Down in the bottom of their hearts those dads knew that the speaker's rebuke was undeserved. Why should a father desert his work, dress up and present himself at a brown-eyed sixth grade teacher's classroom door with the suggestion that the two of them get better ac-

quainted? Please consider the question from the professional point of view.

Without question, parents and teachers should be acquainted with one another. It is an obligation of the school and its allied agencies and organizations to furnish opportunity for such contacts. The customary general invitation to parents to visit the schools, however, does not discharge this obligation. The busy classroom is not a good place to form a mutual understanding.

I have these suggestions to make:

1. That school authorities discontinue the usual vague invitations to parents to visit the schools.

2. That frequent, specific invitations to extraclassroom affairs be extended so that parents may come as invited, expected and honored guests.

3. That these affairs be of a type that will foster parent-teacher understanding and will portray school activities in a fair and interesting manner.

for one-third of their price when new, which made them cheaper than second-hand books!

Teachers and members of the board of education helped the superintendent locate dissatisfied patrons who needed further explanation of the plan in order to obtain their cooperation.

Great care was taken to point out to the graduating eighth grade class and to the proprietor of the local drug store, who had previously stocked textbooks, that any books they might have for sale would be purchased. The school paid both of these obligations in full.

When the donated textbooks were stamped and distributed to the central supply room, one-third of them had to be replaced. While such a large replacement had not been anticipated, the necessary new books were bought in keeping with the spirit of fairness and cooperation which characterized the whole transaction. This attitude won the continued support of the patrons.

After one year of renting books to pupils the teaching staff and the board of education are well satisfied. The extra responsibility of handling rental books is more than offset by the improved status of the school's instructional materials. Parents are pleased because they pay less for more books. Now that it controls all the books used by its pupils, the school staff has freedom to plan a better educational program, knowing that there will be no complaints regarding exorbitant book costs.

Despite unexpected costs the system has worked so well that it has paid for itself in one year. From the start there were no unpaid bills and, in the coming school year, the Palatine school will have sufficient new textbooks for its planned educational program. In addition supplementary texts and library books will be purchased year after year.

A particularly important advantage given by the new system is that the school has been able to change from traditional textbook teaching to the unit type of instruction. This has been possible only because the school now controls the selection of its books and a variety of textbooks can be used rather than 40 copies of the same text.

Palatine Rents Its Books

J. E. CLETTENBERG

LIKE many other schools following the depression, the school at Palatine, Ill., needed many new textbooks as well as many library and supplementary books. Nearly every textbook in the school was between seven and eight years old and the only books in music, by way of extreme illustration, were ten years old!

When the board of education started upon a continuous textbook changing program in order to bring newer instructional materials to the pupils, many parents opposed the changes because of the higher prices they had to pay for new books. These parents had formed the habit of obtaining second-hand books (at second-hand prices) from pupils who did not have further use for them.

Because the educational program of the school could not go ahead unless new books were provided the board of education finally decided upon a textbook rental plan.

Parents known to favor any plan that would give their children better

and cheaper books were invited by the superintendent to discuss possibilities of the textbook rental system. When these patrons had promised their support the superintendent presented a report to the board of education, outlining the costs and administration of a workable textbook rental plan that would not demand any financing by the board.

As put into effect, the plan provided for the donation to the school of all textbooks owned by the pupils. These books were to be left behind by the pupils when school was out in June.

A letter sent home to all parents, showing how they and their children would profit from the new system, resulted in practically all pupils leaving their books behind. No attempt was made to force parents or pupils to donate books to the school since the transaction was placed entirely on a voluntary basis. The letter, moreover, explained that in the future all textbooks would be rented



Story of an Integrated Unit

G. B. WYNNE

How the unit method of classroom procedure was applied to a secondary school in Virginia is told here by the principal of the Exmore-Willis Wharf High School of Exmore

MUCH has been written about the unit method of procedure but little has been said concerning the application of such a theory for pupils in the senior high school. This is a report upon an integrated unit on the basis of classroom experience.

Teachers of language arts and social studies in the Exmore-Willis Wharf High School of Exmore, Va., met to plan two months' work for juniors and seniors in these two fields. They had before them a bibliography of library materials and an outline of the Virginia course of study for secondary schools.

Discussion of current work resulted in the selection of "The Extension of Freedom" as the major function of the unit. Each teacher was assigned to select elements in the environment of the pupils and to relate them to the democratic ideal and to the course of study aims.

A week later the teachers met again to revise their lists of activities and to improve their plans. The

teacher of social studies agreed to introduce the unit in the classroom while the teacher of language arts was present to help different groups plan activities in that field.

When the class met, the teacher of social studies began the discussion from a lead in the unit on world peace which the pupils had completed the day before. A study of Germany and that country's relation

to a possible war in Europe already had been made in this unit.

The teacher began the discussion as follows: "What do you think national socialism means to the rights of the German people?" A typical reply was, "The Germans do not have any rights." Then the teacher asked what rights the American people enjoy that are forbidden in Germany. Following an informal discussion the class agreed that the purpose of the new unit would be "to determine how we secured rights and how we may protect them." Each pupil was urged to find out what rights American people enjoy and to list them for presentation at the new class. When the class met again a number of rights were listed on the blackboard, and these the teachers and pupils discussed informally.

At a third meeting of the class the following elements in the environment of the pupils were listed on the blackboard for consideration: Con-

stitution, Supreme Court, Bill of Rights, Jefferson, Hitler, Fascism, Communism, Lincoln, Jackson, Theodore Roosevelt, Franklin D. Roosevelt, literature, education, schools, public documents, housing, New Deal, slums, poetry, debate, Hamilton, Jews, insurance and immigration.

Each pupil was asked to select the element that interested him most. Groups were then formed on the basis of individual interests.

Activities Selected

Each teacher then directed the pupils in the different groups to select activities in his field such as the following:

THOMAS JEFFERSON: In the field of social studies, reading and investigation to learn how freedom in Virginia was influenced by the life and works of Jefferson; in the language arts, making an oral talk on Jefferson as a writer to determine the value of his writings to the cause of liberty.

GREAT DOCUMENTS: In social studies, listing the great documents that have extended freedom and enumerating the different rights provided for them to find out how man has expressed himself in an effort to obtain human freedom; in language arts, debating the question, "*Resolved, That the Magna Charta played a greater part in the extension of freedom than did the Constitution of the United States.*"

HOUSING: In social studies, reading and investigating housing conditions in this country to determine the need for planning in the construction of buildings in slum areas and to determine whether we need the Federal Housing Administration; in language arts, reading "*Twenty Years at Hull House*" and "*How the Other Half Lives*" to determine why the economic rights of the unfortunates should be extended.

SUPREME COURT: In social studies, reading important decisions of the Supreme Court to see how they have influenced the course of government; in language arts, writing a newspaper story concerning decisions of the Supreme Court and legislation under the New Deal.

IMMIGRATION: In social studies, reading and investigating to find the influence of immigration upon the

American people; in language arts, studying the life of Mary Antin to learn the opportunities that America offered Jewish immigrants.

CONSTITUTION: In social studies, reading about the origin and development of the Constitution; in language arts, writing an imaginary account of a visit to the Constitutional Convention of 1787, or speaking in defense of the provision for the two houses of congress.

LINCOLN: In social studies, reading to learn the effect of African slavery over the caste system in the South; in language arts, writing a debate defending slavery from the point of view of the South.

FRANKLIN D. ROOSEVELT: In social studies, determining what the New Deal executive and legislators have done to extend economic rights to farmers; in language arts, writing an article entitled "Roosevelt and the Cotton Problem" or "Roosevelt and Wallace and the Problem of Hogs and Corn."

LITERATURE: In social studies, determining what contributions Rousseau, Locke, Voltaire and other famous writers in the seventeenth and eighteenth centuries made to the extension of freedom; in language arts, learning the influence of Burns, Wordsworth, Goldsmith, Gray, Lowell, Freneau and other poets over the democratic ideal.

After completing these activities the class decided to prepare a program relating to freedom to which every group contributed. One group staged a debate, "*Resolved, That England contributed more to freedom than the United States,*" while another group presented a pageant entitled "Literature and Freedom." The culminating activity was divided into three parts and required three hours for presentation during successive chapel periods.

Individual Differences Recognized

Provision was made for individual differences. No pupil was required to do the impossible; each one was able to do as much work as he wished. Materials in accord with the various levels of intelligence were provided.

The teachers of the two core fields, language arts and social studies, divided the desired objectives under

the headings of generalizations, attitudes and skills.

To check the improvement of pupils both teachers required the pupils to give oral and written reports. While those of superior ability wrote term papers, others did tasks of a less difficult nature. All errors in written work were checked by the pupils who looked up the rules and corrected their own work. Then they rewrote the papers, making necessary corrections on the revised copies of their reports.

Each group also was tested for subject-matter achievement. As the work developed the teachers checked changes in the attitudes and skills of the pupils. After the culminating activity was over the members of the class under the direction of the teacher listed twenty questions on the blackboard. Each pupil copied these in his notebook for further study. During the next three class periods the whole class carried on an oral discussion of the questions that had been selected for further consideration. These discussions were followed by a test of general nature which covered the work of the whole period.

The group and the class tests revealed that many objectives had been met and that all pupils, on the basis of their ability, had done good work.

Teachers and Films

While there is considerable incidental and supplementary learning from all motion pictures, those that are designed for classroom use must make a specific contribution, says Charles A. Gramet, chairman of general science at Franklin K. Lane High School, Brooklyn, N. Y., and a university instructor.

The knowledge, technics and skills necessary for film production are possessed by few teachers today. There may be some that have learned them at their own expense and effort. Others may be trained. The abilities of these teachers may be utilized in two ways for the improvement of teaching films. Commercial producers may use them as consultants and advisers. Schools may provide them with facilities for producing pictures that are needed.

Should the State Help Support

Sectarian Schools?

ARVID J. BURKE

FINANCIAL aid for denominational schools from the American states within ten years—so reads one prediction.

Most American citizens have inherited the policies of nonsectarian, democratically controlled common schools. They do not realize the relationship between these policies and public financial aid to denominational schools. If they are subjected to propaganda decrying the injustice of "double taxation" and pointing out the "potential saving to the taxpayers," many of them might vote to grant aid to denominational schools without considering the implications of this act.

The citizens of the American states must know exactly what denominations are asking for when they seek public financial support for their schools. They must know, too, the implications of changing present educational policies.

When it asks public financial support for its schools, a religious denomination asks for the following from the citizens of the American democratic state:

1. Abandonment of the policy of separation of church and state, the citizens taxing themselves for the support of schools of a particular church in which teachers must be capable of teaching the religious doctrines of that particular church and teaching other subjects in accord with these doctrines.

2. Abandonment of the policy of direct democratic control over education by the citizens, the citizens taxing themselves for schools under the

control of individuals, corporations or societies independent of the whole body politic.

3. Abandonment of the policy of common schools open to all, the citizens taxing themselves to promote separation and insulation.

4. Abandonment of the policy of publicly financing only one school system in a community and only one school in a neighborhood, the citizens taxing themselves to support as many school systems as there are religious denominations that desire separate schools.

The constitutions of the United States generally guarantee freedom of religion to each individual citizen. The constitutions do not limit this freedom to the Christian churches but allow the citizens to believe in the Jewish, Mohammedan, Buddhist or any other philosophy of life. Under these constitutional guarantees, which imply the plurality of religious truths, the states have tended to protect a citizen in the exercise of his faith and not directly or indirectly to indoctrinate him into a particular faith. That is the meaning of separation of church and state and is one justification for the refusal of American citizens to finance religious indoctrination.

Separation of church and state generally has abolished all religious tests for civil employment. Since the primary purpose of church schools is religious instruction along sectarian lines and since such education requires religious tests for teaching, United States citizens have been justified in not giving public financial support to sectarian schools.

The American democratic states have generally allowed a maximum of freedom in matters of education. Children are compelled to attend school but they are not compelled to attend a public school. The Amer-

ican parent may educate his child himself, hire a tutor or send the child to a private or a denominational school. Moreover, the American states have seldom challenged the right of any denomination to use education for purposes of religious indoctrination. Under a ruling of the Supreme Court, it is not likely that any state could do so unless the instruction was treasonable.

Separation of church and state ends when denominational schools are publicly financed. By financing such schools, the state becomes a party to imposing religious tests upon those employed with public funds and to subsidizing certain churches to the disadvantage of other churches.

Any church that opens publicly financed schools of its own gains the following advantages over other churches: (a) freedom from direct democratic civil control over its schools, (b) the right to impose religious tests upon teachers, (c) the right to use censorship and propaganda to promote its doctrines, (d) property rights to its schools and (e) continuance of the right of members of the church to vote on public school matters, sit on public school boards and teach in the public schools free from religious tests.

Members of a church that does not open publicly financed schools of its own cannot (a) escape direct democratic control over education, (b) impose religious tests upon teachers, (c) use public funds to indoctrinate its beliefs, (d) acquire any property rights in public schools or (e) vote on publicly financed denominational school matters, sit on its boards of control or teach in its schools free from religious tests.

Because most of our thinking on church and state is imported, much of the discussion of church and state

Doctor Burke, in presenting arguments against diversion of public funds for sectarian schools, states his views as an individual, not as officer of New York State Teachers Association

relationships in the United States is based upon false assumptions. State, to us, means the collective will of all the citizens, not in the state unit alone but in each subdivision of the state. The will of the citizens in any government unit may be that of the majority, but in most instances it is a compromise between a majority and one or more minorities. Militant minorities prevent a majority from becoming oppressive.

Because the states have conceded a maximum of control to citizens in the various local government units, decentralized direct democratic control over education has characterized the United States. Yet much of the discussion of church and state relationships presumes a centralized superimposed state which imposes its authority upon the citizens.

Direct decentralized democratic control over publicly financed education is a protection that citizens should guard jealously. Such control enables them to change any type of education that fails to meet their needs. Under democratic control, a government that fails to meet the needs of its citizens cannot use education to perpetuate itself after it has outlived its usefulness. A centralized or absolutist government or church, on the other hand, by controlling education can perpetuate itself long after it has ceased to serve the best interests of its citizens or members.

Local Control Will Disappear

The American citizens by pursuing this policy do not deny minority rights. Minorities can participate in democratic control of public schools. At times and on specific policies, the minority views even may prevail or modify the majority opinion.

If the democratic state publicly finances schools under private and denominational control, local democratic control over education as we now know it will disappear. Under the present policy, all citizens in a school district, no matter to what church they belong, can vote on public school matters or sit upon public school boards. Denominational schools, on the contrary, generally are internally controlled by individuals, corporations or societies. This control may reside in or be exercised by individuals within or without the

democratic state. The citizens of the state might by legislation impose external controls on such schools, but neither the majority nor the minorities in the democratic state or its subdivisions can participate directly in the control of denominational schools. Furthermore, if any church gets publicly financed schools other churches are placed at a disadvantage which they can overcome only by opening publicly financed schools of their own. This factor and competition for pupils to increase state aid would hasten the disintegration of democratically controlled public schools.

To grant state aid to institutions organized on state, national and international bases would give these institutions more centralized control over education than the citizens in any American state have yet assumed.

For International Propaganda

Institutions involved in international politics and even controlled by citizens of a foreign nation could use their schools for propaganda purposes. Such propaganda need not be overt. Nations might even struggle for the control of international organizations in order to gain control over education in the democratic state. Institutions and groups organized for ends contrary to democratic principles or organized for ends contrary to democratic tenets by controlling education would be better able to indoctrinate behavior inimical to citizenship in the democratic state. Such indoctrination need not be overt; organization and environment factors might even be more effective.

By guaranteeing freedom of religion, speech and press, and so many other individual freedoms, the democracy has fostered conflict, which makes some type of common school a necessity. Carried to its ultimate extreme, American democracy would disappear in the same chaos as its predecessor, Greek democracy. It has been absolutely essential, therefore, that democracy promote common understandings and purposes among those holding radically different philosophies of life. For this reason, the American citizens have financed common schools open to all, and this fact, by enabling Jew, Catholic, Protestant, English, Irish, Italian and

others to know each other as human beings, has done more to promote harmonious relations among men than any single religious denomination could have done.

Publicly financed common school education, it should be noted, has always been regarded as a minimum program which takes the children out of the home for only about 10 per cent of the year. Education, on the other hand, is the sum total of our experience. Since the citizens have asked only 10 per cent of the time to promote harmony among themselves, other institutions have had ample time to indoctrinate them according to their respective creeds.

By abandoning the common school concept and by publicly financing denominational schools, the American citizens lose one of their most important integrating forces. The state would finance permanent divisions among its citizens but it would do little to promote harmony among them. Not only would religious denominations become another permanent lobby for public funds, but their control over education would enable them to insulate their constituents so that political differences and hatreds might become intensified.

Will Eventually Increase Costs

The public financing of denominational schools eventually will result in increased school costs. Instead of financing only one school system in a community and only one school in a neighborhood, the public will be paying for as many school systems and separate schools as there are denominations and other organized groups wanting separate schools. The shift from common schools to publicly financed denominational schools means a gradual abandonment of a large part of the present public school plant, increasing duplication of plant as denominational rivalry increases and a decrease in the pupil-teacher ratio, especially in sparsely settled areas in which education is costly and inefficient even under present conditions. Even in cities separate publicly financed schools increase costs because there are competing schools in the same neighborhood and, consequently, duplicating services and overhead.

He Is a Good Board Member

DENNIS H. COOKE and QUILL E. COPE

COPIES of the rating scale for school board members, presented in the February issue of *THE NATION'S SCHOOLS*, were mailed to a number of county superintendents in Tennessee, representing 105 county school board members. The county superintendents rated 101 of these board members. Ninety-one of the board members also were rated by their respective high school principals.

The coefficient of correlation between the superintendents' and principals' rating is $.812 \pm .024$. The county superintendents either filled out or asked their board members to fill out a brief questionnaire regarding some of the social, economic and personal characteristics of the board members.

It was decided to divide the entire group of 101 superintendents into the best 25 per cent and the remaining, or poorest, 75 per cent. Because there was not a definite line of demarcation at the 25 per cent point, the upper 23 members, or 23 per cent, were used as the best group and the remaining 78 members, or 87 per cent, as the rest of the group.

From table 1 it is obvious that the best board members under consideration are selected by a direct vote of the people.

Mendenhall says, "The weight of opinion is that he should be selected by popular vote at large at a special school election on a nonpartisan ticket."¹ Chancellor says, "A board by election at large is the best kind of a board for towns and cities of less than 20,000 in population."² In this respect the results of this study seem to agree with other opinions.

In comparing the ratings of board members who have served two years with those who have served seven

years, it is shown in table 2 that the shorter term is better than the longer one. There may be, however, an optimum between these two extremes that is not brought out in this study. In this connection Chancellor says,

cities school boards should not exceed five or seven in number."³

It appears that the conclusion of this study, namely, that the best members are on boards composed of five or seven members, preferably five, is in line with the proposals of various educational authorities.

Table 1—Method of Selection of Best Board Members as Compared With Other Members

Method Used	Best Members		Rest of Group		Entire Group	
	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency
Popular vote	52.2	12	33.3	26	38	38
County court	47.8	11	66.7	52	63	63
Total	100	23	100	78	101	101

Table 2—Length of Term of Best Board Members Compared With the Remainder of the Group

Length of Term	Best Members		Rest of Group		Entire Group	
	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency
2 years	69.6	16	37.2	29	44.5	45
7 years	30.4	7	62.8	49	55.5	56
Total	100	23	100	78	100	101

Table 3—Size of Boards on Which Best Board Members Serve Compared With Other Boards

Size of Board	Best Members		Rest of Group		Entire Group	
	Per Cent	Frequency	Per Cent	Frequency	Per Cent	Frequency
5 members	47.8	11	17.9	14	24	25
7 members	30.4	7	57.7	45	52	52
9 members	17.4	4	6.4	5	9	9
15 members	4.4	1	18.0	14	15	15
Total	100	23	100	78	100	101

"A term of three years appears to be the minimum of a good length of tenure." On the other hand, Mendenhall believes, "The best authorities on school administration favor a five-year term rather than a three."

An analysis of table 3 shows that almost one-half of the best members are on five-member boards, while only 21.8 per cent of the best members are on boards of nine or more.

Mendenhall says, "In smaller communities a desirable number [board members] is five." It is the opinion of Hines that, "Even in the largest

There seems to be little or no relationship between the ages of board members and their ratings on the scale. The median age of the best board members is 50.8, while that for the remainder of the group is 50.9. The median age for the entire group is 50.6 years. It is interesting to observe, however, that 73.9 per cent of the best board members are between the ages of 35 and 55, while only 60.4

¹Mendenhall, Edgar: *City School Board Member and His Task*, Pittsburg, Kan., College Inn Book Store, 1929, p. 5.

²Chancellor, W. E.: *Our Schools, Their Administration and Supervision*, Boston, D. C. Heath and Company, 1904, p. 21.

³Hines, L. H.: *The Ideal School Board Member From the Superintendent's Point of View*, Washington, D. C., Proceedings of the National Education Association, 1911, p. 996.

per cent of the poorer members are between these ages. There is a larger percentage of the less valuable members over 55 years than there is of the best members. Chancellor is of the opinion that "persons under 30 years of age do not add to the success of a board of control in education." Lyman says, "The age between 40 and 50 seems to produce the greatest efficiency."⁴

Because the percentage of the best members who are farmers is smaller than the corresponding percentage for the rest of the group and for the entire group, there is some indication that farmers are not the best board members. The data in table 4 also show that the best board member is the proprietor of his own business.

Table 4—Comparison of Best Board Members With the Remainder of Group in Regard to Occupation

Occupation	Best Members		Rest of Members		Entire Group	
	Frequency	Per Cent	Frequency	Per Cent	Frequency	Per Cent
Agriculture	12	52.2	52	66.7	64	64
Proprietor	6	26.2	11	14.1	17	17
Professional Work	2	8.7	3	3.7	5	5
Clerical Work	1	4.3	2	2.6	3	3
Managerial Service	0	.0	5	6.4	5	5
Manual Labor	0	.0	1	1.3	1	1
Commercial Service	1	4.3	2	2.6	3	3
Domestic Work	1	4.3	2	2.6	3	3
Total	23	100	78	100	101	101

In keeping with the findings of this study Hoel and McCracken found that the largest percentage (63.7) of the county board members in Ohio are engaged in agricultural pursuits.⁵ Struble concluded that farmers show unusual financial ability but rank low in their educational policies. In his study professional people ranked very high as board members.⁶

The median number of children of the best board members is 2.86, while the median for the remainder of the group is 3.58. The median number for the entire group is 3.58. These data indicate that the best board member is the parent of at least two children and not more than three, while the least valuable member is

the parent of three or four children. Contrary to these findings Struble concluded that the value of board membership increased in proportion to the number of children the board member had, through four. Beyond this point the number had no effect.

The best board members have a median of 1.5 children in school, while the rest of the group have 1.7. The difference is too small to indicate any significant relationship. Hoel and McCracken reported that 80 per cent of the most valuable board members have children in school, while only 67 per cent of the least valuable members have children in school. Counts is of the opinion that the best board members do not necessarily have children in school.⁷

Thirty-nine per cent of the best board members in this study have had teaching experience, while only 24.1 per cent of the rest of the group have had such experience. These figures probably indicate that teaching experience is of some value to county school board members. In this connection Kulp and Davidson found in a study of 733 board members a definite relationship between the teaching experience of board members and their educational attitude, the more the experience the more valuable the member.⁸

The best board members in this study have served a median of 4.75 years on the board, the rest of the group have served 3.5 years and the entire group has served for 3.8 years. This study indicates that tenure on the school board adds to the value of

the board member's service through the first ten years of service. His term of office should be relatively short, say three years, making it necessary that he be approved or disapproved by the electorate at rather frequent intervals. Contrary to the facts in this study, Kulp and Davidson found no relationship between the length of time a member had served on the board and his board attitude.

The percentages show that the best board members in this study receive slightly more compensation for their services as board members than the members of the rest of the group receive. In no case, however, is the compensation sufficiently large to induce any person to serve for the compensation that he receives directly for his services. Hines says, "The ideal school board is likely to be composed of men serving for small salaries." Mendenhall says, "The weight of opinion of the best authorities in school administration is that they (school board members) should not be paid." Cubberly doubts the advisability of paying board members.⁹

Slightly more than 52 per cent of the best board members in this study belong to various community and civic clubs, while only 29.5 per cent of the rest of the group belong to clubs. It appears, therefore, that the best board members tend to be more active in clubs, lodges and community and civic organizations than do other members.

This study fails to show any relationship between the extent of the board member's interest and activity in politics and the value of his service as board member. On the other hand, Mendenhall says one characteristic of a good board member is that he is free from political affiliations and entanglements and is able to stay out of petty politics. Almack is of the opinion that politicians do not make good board members.¹⁰

The median income for the best board members is \$1600, for the rest of the group it is \$760 and for the entire group it is \$864. These data show a definite relationship between

⁴Lyman, Lee: Qualifications of the School Board Member, *Am. School Board J.* 92:74 (March) 1936.

⁵Hoel, C. E., and McCracken, C. C.: Traits and Qualities of School Board Members, *Am. School Board J.* 75:39 (Dec.) 1927.

⁶Struble, G. C.: A Study of School Board Personnel, *Am. School Board J.* 65:48, 137 (Oct.) 1922.

⁷Counts, G. S.: Social Composition of Boards of Education, Chicago, University of Chicago Press, 1927, p. 77.

⁸Kulp, D. H., and Davidson, H. H.: Should Ex-Teachers Be Members of Boards of Education? *School & Soc.* 38:255 (Aug. 19) 1933.

⁹Cubberly, E. P.: *Public School Administration*, Boston, Houghton Mifflin Company, 1929, p. 100.

¹⁰Almack, J. C.: *School Board Member*, New York, The Macmillan Company, 1927, p. 16.

a board member's income and his value as a board member. Jagers suggests that income is probably one test of a board member's ability.¹¹ All the authorities who make any comment on this point are of the opinion that a man who is not fairly successful in his own business affairs should not be elected to the board.

The best board members have been more successful in accumulating property than the rest of the group. The median value of the best board members' property is \$4892, while that for the rest of the group is only \$2738. The median value of the property for the entire group is \$3247. Seventy-four per cent of the best board members have property

valued at \$2500 or more, each, while only 54 per cent of the rest of the group fall in this classification.

The best school board member has more education than the rest of the group. Ninety-six per cent of such members have an eighth grade education or better, while only 68 per cent of the rest of the group reach this standard. Thirty-nine per cent of the best members and 15.4 per cent of the rest of the group have a high school education or better. Approximately 10 per cent of the best members have a college education, while only 1 per cent of the rest of the group reach this standard. In this connection Hoel and McCracken say, "Any man or woman who is to participate in such [school] responsibilities as these should possess character and a liberal education."

¹¹Jagers, R. E.: *Administering the County School System*, New York, American Book Company, 1934, p. 14.

Tarzan, the Teacher

ARTHUR C. SELKE

ALVIN JOHNSON had become a myth unintentionally. It started on the day he had come to Lakeland to be principal of the three-teacher high school. He had just worked his way as quarryman through the four-year course at the Sandstone Teachers' College.

After arriving at Lakeland he had the drayman deliver his trunk to the new rooming place. The baggage was left on the front porch because the landlady was entertaining the Ladies' Aid and male help was not available. Mr. Johnson returned from the first faculty meeting, recognized his baggage, and without asking for help, carried the heavy trunk alone to his room. The women guests looked on amazed. Actually it was no great feat. Larger burdens are carried singlehanded in industrial towns and Mr. Johnson thought nothing of it. But the female audience thought otherwise and that evening the husbands knew about it. Soon it was discussed all over Lakeland in pool hall and church with the same avidity.

Even Horace Jones, Lakeland cut-up, became afraid of this mild-mannered principal. Horace was a

malicious type of boy who enjoyed other's misfortunes. He had a host of tricks in his repertoire of mischief, such as putting marbles on stairs, soaking girls' hair in ink, spilling water on school seats or putting tags with humorous mottoes on pupils' backs. His practical jokes were adjusted to the time and occasion, much to the anger of both pupils and parents.

His latest trick was accomplished by hiding in a closet at the head of the stairs near the exit of the girls' cloakroom. As the girls started down the stairs, Horace would stick out his foot and trip the girls. Some would be hurt but this did not worry Horace. He took refuge in the unwritten school law that pupils should not tell tales on one another.

One noon as school was dismissed Horace was at his favorite pastime, tripping girls down the stairs. Mr. Johnson, scenting the source of trouble, decided to go the same route as the girls. The foot came out and the schoolman grabbed Horace's collar. The culprit, seeing that he was trapped, yelled and tried to escape down the stairs. Principal and pupil tumbled down the first flight, and

being unable to arrest the fall on the first landing, both went down the second flight as well. Horace hit the main floor at the foot of the stairs headlong and Mr. Johnson landed feet down, one on each side of the boy. Fearing injury, the principal picked up the youngster, took him into the near-by office and admonished him. Although Horace had been thoroughly frightened and wailed loudly, he was soon dismissed, and both went to their noon meals.

That afternoon the principal went to mail a letter on the train. He was embarrassed by the stares of the people on the depot platform. He was relieved when he met a member of the school board. The member greeted him and said, "Well, Prof, you sure cleaned up on Horace Jones, but I tell you he had every bit of it coming. The beating is good for him. I've heard a lot of complaints about him and I will back you to the last ditch."

"Cleaned up on Horace?" Mr. Johnson repeated. "What story is going the rounds now?"

The story with variations ran something like this: The young principal had taken the boy by the collar and kicked him down the first flight of stairs. A thorough shaking up was administered on the first landing, after which Horace was booted down the second flight of stairs. As the culprit lay prostrate on the floor at the foot of the stairs the principal jumped up and down on him several times. After these preliminaries, the principal had hoisted the boy into the office and had beaten the mischief maker within an inch of his life.

Mr. Johnson laughed and thought the story too absurd to refute it. This merely acted to confirm the gossip and Horace's more truthful account was not believed, partly because of the youngster's untruthfulness in general. Both parents and pupils, who in some instances had been victims of the boy's warped sense of humor, believed the story only too gladly. And although Mr. Johnson was not aware of it, the myth of his superhuman strength was confirmed more than ever. In curbstome gatherings, in pool halls and ladies' meetings he was nicknamed, "Tarzan, the Teacher."

Lubbock Looks to Radio

MRS. ROSS AYERS

THE radio was first used by the public schools of Lubbock, Tex., in 1936 during American Education Week. Since that time the schools have presented weekly programs over the local station KFYO and, in addition to the regular programs, when special events are given by the schools these too are put on the air.

Most of the programs take fifteen minutes to present but occasionally a thirty-minute program is given. The time of day is important, but conditions in different localities vary

and this factor must be worked out for each situation.

Radio committees in each building plan the programs. Each school gives two programs a year and special clubs and departments give the other broadcasts. At a meeting of all the radio committees of the city the schedule is made up. Before each program goes on the air it is rehearsed twice, once at the school presenting the program and again on the stage at the senior high school where it is presented so that the

sponsors may hear it over the school public address system and may test sound effects and voice.

During the first rehearsal pupils are taught radio signals suggested by the National Broadcasting Company in its helps for educational purposes. Only four signals are used: to talk more loudly, to talk faster, to talk more slowly and to move up to the microphone.

Few children have to be told to talk faster but the louder and slower signals are used frequently. During the first rehearsal children are placed just as they will remain during the broadcast. A semicircular arrangement has proved to be the best, since the children may get into position at the microphone with a step or two. Singing, too, is broadcast better from a semicircular position.

Two microphones have been found convenient. One is placed near the piano for the singing group and one in the middle of the stage for the talking group. A representative of the local station is always at the controls to regulate the microphones.

Fifty children are not too many for the Lubbock programs to present on one broadcast, since the school stage affords adequate space for them.

No stereotyped material has been presented. Each school is free to select the type of program it wishes to present. Original plays and "actual situation" programs are popular. For the situation programs the schoolroom activity is produced as realistically as possible.

Speeches more than two minutes in length are avoided since the span of listener attention for one voice is limited. When subjects that require explanations are given they are presented in dialogue form.

All-music programs are given infrequently since the committees have discovered that music interspersed with talking is much more desirable.

Sound effects are worked out by the pupils and their teachers. Children who are poor speakers have become excellent "sound effect men."



Above: Third grade pupils act as chorus and speakers in presenting a program with the theme, "What Will We Do With Vacation Time?" At left: Pupils ready for a safety program, with the sound effect men waiting for their cues. An electric egg beater was used for the motor of the car and the glass and wastebasket made the crash when the "one-armed driver" had the inevitable accident.

Certification Laws Construed

THE recruiting of superior teaching and administrative personnel is one of the most important keys to progress in public education. One significant factor is the remodeling of certification laws. In recent years state after state has revamped its statutes touching this subject, and the upgrading of the minimum requirements for admission to the profession, long in progress, is likely to continue.

A few modern trends come easily to mind. Among these may be mentioned the tendencies to provide separate certification for school administrative officers, to centralize the certifying authority in state departments of education, to issue certificates upon the basis of educational credentials rather than upon special examination, to abolish or restrict life certificates, to supplant blanket teaching certificates with specific certification by subject and to entrust the administration of licensing to a full-time professional officer under the state board of education rather than to part-time boards of examiners.

Causes of Disagreement

Progressive changes in the statutes frequently precipitate the possibility of real or imaginary hardships upon teachers already in the service of the state, and sometimes occasion controversies which reach the courts. Cases of this kind serve to cast interesting sidelights upon current changes being made in the various states.

In Virginia the administrative position corresponding roughly to the county superintendency elsewhere is that of the division superintendent. These officers are appointed by the local school boards, for a term of four years, from lists of eligibles provided by the state board of education. The statutes empower the state board to set up minimum qualifications for eligibility and require it to publish its rules governing this matter on February 1 of each year in which division superintendents are to be chosen.

M. M. CHAMBERS

In February of 1937 the board published a rule specifying the following minimums: (1) a master's degree, at least 15 semester hours in professional training, including courses in finance and administration, and three years' experience as a school principal or supervisor; (2) general administrative ability as evidenced by experience in business or in the business administration of schools.

The rule further stipulated that the college training or experience must have been within ten years from the date of the application unless the applicant had been performing the functions of the superintendent during that time. The following proviso was also added: "Division superintendents now in service shall be considered to have met the eligibility requirements which were in force at the time of the beginning of their continuous service and shall not be removed from the list of eligibles because of subsequent changes in eligibility requirements which may have been made during their period of continuous service."

The right of the board to insert this proviso was challenged by certain interested persons who thereupon petitioned for a writ of *mandamus* to compel the board to strike from the eligible lists the names of

certain division superintendents in service who admittedly could not meet the established minimums unless saved by the proviso. The petitioners' contentions appeared to have some color of support in the fact that some acts of the board during the years since 1930 had indicated an intention to impose more stringent requirements than the proviso of 1937.

The highest court of the state, however, reversed a lower court order directing the board to strike the names from its lists and dismissed the petition. Said Mr. Justice Holt: "There are 56 division superintendents in this challenged class. To remove them would throw our public school system into regrettable confusion. Certainly it would not promote its interests. Plainly, they are not to be favored over other eligibles. The local boards might have selected them or they might have selected any other names which appeared upon the lists. The state board should certify its full list to the local board."¹

Gives State Board Free Rein

As a result of this decision the quasi-legislative discretion of the state board of education is left free from interference. Incidentally, a concession is made to conservatism, and the raising of educational requirements is in effect somewhat retarded in favor of the retention of personnel now in service. Upon the merits of this issue it would probably be presumptuous to express an opinion here.

Litigation on a different point was recently concluded in the District of Columbia. The examination of eligibility to junior high school teaching positions consisted of both written and oral parts, the written test being given a few days or weeks in advance of the oral test. An applicant who was properly qualified under the rules of the board of education at the time took and passed the written test,

¹State Board of Education v. Carwile et al., (Va.), 194 S.E. 855 (1938).

Revision of obsolete certification laws and the raising of certification standards are significant guideposts marking the advance of education in 1938. Trends are cited by a school law authority

but was made ineligible by a new rule of the board requiring a master's degree, enacted after she had passed the written examination but before she had taken the oral test. By mistake she was allowed to take the oral examination, and her name was placed on the eligible list and allowed to stand there for about a year, when it was removed without notice being given her.

Upon learning of the situation, the teacher sued for a writ of *mandamus* to compel the board to appoint her to a junior high school teaching position. The court denied the writ on the ground that the actions of the board were within its powers and held that the erroneous placing of her name on the list did not enlarge her rights.²

An Indiana certification act of 1923 specifies that the high school teachers must be licensed to teach particular subjects but, presumably in view of the fact that a too rigid application of this principle might engender great difficulties in the administration of small high schools, it authorizes the issuing of permits to teach a high school subject related to subjects for which the teacher holds a regular license. These permits are to be issued by the state board of education upon the recommendations of the state superintendent of public instruction.

An applicant who held regular licenses to act as a principal and to teach social science and mathematics was appointed principal of a township high school, and with the advice and approval of the county superintendent he assigned himself to teach social science, mathematics and physics.

Through the agency of the county superintendent he applied for and received from the state superintendent a permit to teach physics, based upon his showing that he had had instruction in the subject and that it was related to mathematics, in which he held a regular license. Subsequently the township trustee dismissed him in the middle of the school year on the sole ground that he had no regular license to teach physics. Later, the general trial court

²United States ex rel. Corbin v. Doyle, President of Board of Education, et al., (D.C. App.), 93 Fed. 646 (1937).

awarded him damages against the school township for wrongful breach of contract, and the judgment was affirmed by the state supreme court.³ Thus the degree of flexibility in the administration of licensing by specific subject provided in the statute was sustained. Apparently the case arose only because the township trustee misunderstood the law.

An Illinois statute of 1929 provides that there shall be two kinds of certificates: those unlimited as to time, and those bearing a time limit. The latter are to be issued by a state examining board which prepares questions and marks the papers written at examinations, and the examinations which must be conducted by the county superintendents in their respective counties. The statute declares that, "All certificates issued under this act shall be state certificates valid in every school district coming under its provisions," but also stipulates that the provisions relating to limited certificates do not apply to counties having a population of more than 500,000. This exempts Cook County.

A teacher holding a limited certificate earned at an examination conducted by the county superintendent in DuPage County was employed as a teacher in Cook County, but was dismissed from her position after only about a month of service. She sued for damages for wrongful dismissal but was defeated in the lower court on the ground that her com-

³Union School Tp. of Gibson County v. Sellers, (Ind.), 12 N.E. (2d) 508 (1938).

plaint stated no cause of action. This judgment was affirmed by an Illinois court of appeals. After pointing out that the statutes forbid any board of school directors to pay public money to a teacher who does not hold a valid certificate of qualification, the presiding justice concluded: "Plaintiff was not authorized to teach in the elementary schools of Cook County outside of Chicago, because she held no certificate from the county superintendent of schools of Cook County."⁴

The foregoing case reveals that under the act of 1929 certification in Illinois is still localized to a considerable extent and suggests the query as to whether a higher degree of centralization might be desirable.

From all the cases herein discussed it appears that the courts adhere to their function of interpreting the intent of the legislature in the matter of licensing teachers and that they do not assume the legislative prerogative nor usurp the discretion which may have been delegated to state boards of education or other educational authorities.

These recent cases also afford glimpses of the present status of certification laws in the respective jurisdictions, showing various stages in the progress toward the principles approved by the best current professional thought. An important responsibility of educators is to point out needed steps in reconstructing the statutes.

⁴Street v. Board of Education of School Dist. No. 113, (Ill. App.), 12 N.E. (2d) 241 (1938).

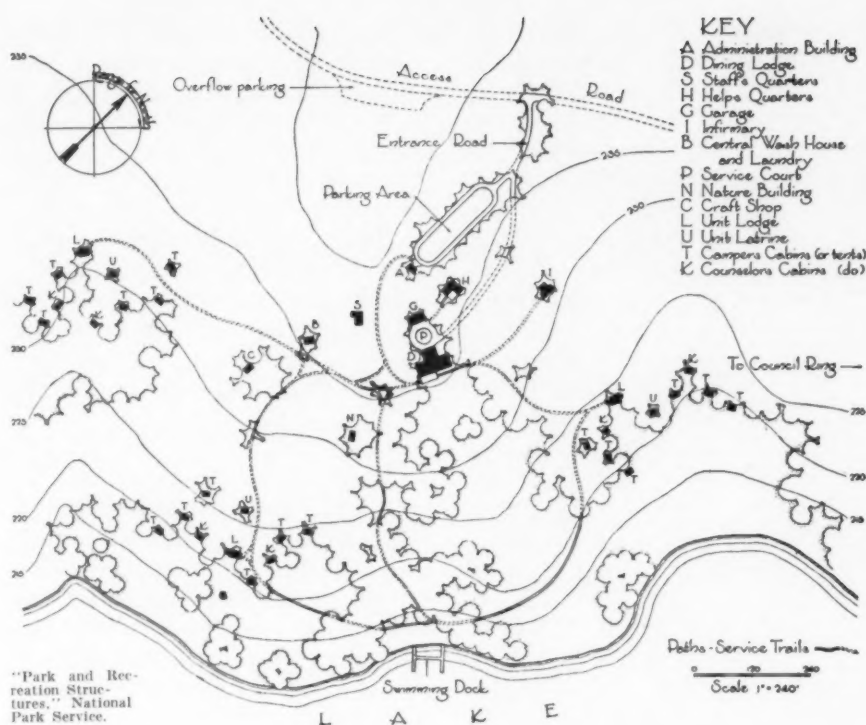
Before Turning In the Keys

FROM the Iowa State Department of Education comes a timely warning to rural school teachers in regard to closing school buildings for the summer. Before turning over the keys to school officers, it is important that buildings and equipment be put in proper order. Especially should libraries and equipment be carefully stored and locked for the vacation period.

Perhaps the secretary or school director will call for the phonograph, records and other equipment of that

nature for safe storage in his own home. School property should not be exposed to vandalism or to the wear and tear of vacation idleness without due protection. Doors and windows must be securely fastened.

Some rural teachers complain that during the summer housecleaning, teaching aids and bulletins have been destroyed. To avoid this, all bulletins, registers, courses of study and primary equipment should be placed in locked desks or cupboards designed for storage.



Camps of the Future

HERBERT H. TWINING

"IF CAMPING experience is good for one child it is good for all children and must be brought ultimately within their reach."

Reflection upon this statement, frequently heard today, results in a multitude of questions: Who will sponsor these camps? From where will leadership come? What will be the general pattern of future camps, including layout, program and objectives? Will the expansion of the movement eliminate some of its finest contributions to education?

Three clearly defined groups of persons are found among the leaders of schools and camps. There is the camp director group which views with alarm the part that schools and universities play in the program of camping. These men believe that rugged camping experiences bring learning values that no other experiences offer, that any effort on the part of schools to assist in the guidance of the camping program and training of personnel may bring serious results and make it impossible for a camp to function effectively.

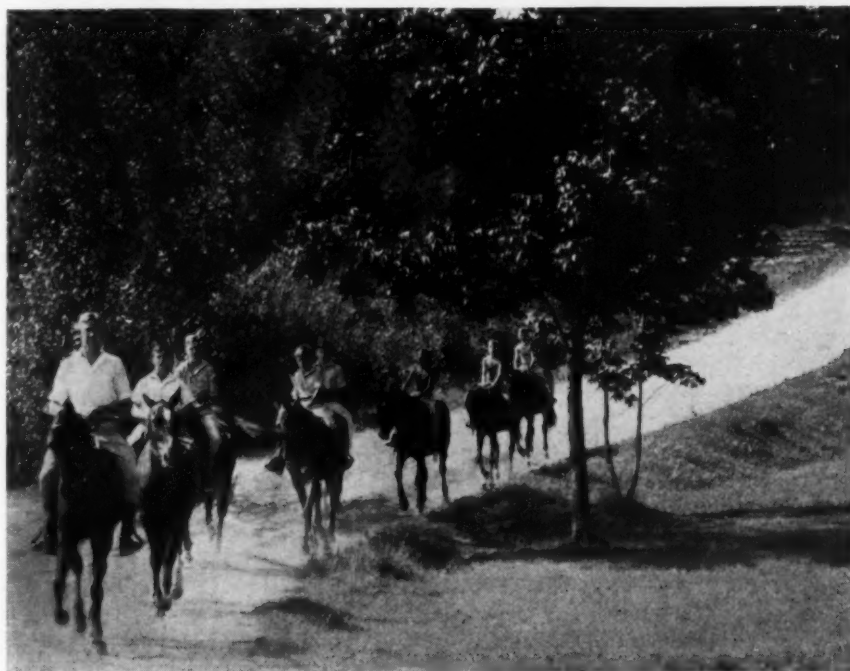
On the other extreme is the group of school people which believes that camping must supplement the school program and that the camp program must be patterned closely after that of the school if it is to be successful.

The encouraging note in the whole situation is that the large majority of people, including camp and school personnel, giving intelligent thought to the future of camping and the broad educational interests of youth, recognize that camping offers a unique contribution to education through its informal unregimented activities. The fact that many camp directors are welcoming the close working relationships that are being built up between camps and universities and schools through counselor training courses, conferences, seminars and graduate studies is evidence that this group recognizes that the schools have certain methods and training technics that are valuable to the camping program.

Also, many leaders in secondary schools and in institutions of higher learning are looking to the trained camp personnel for leadership in training camp personnel. This working relationship between camp and school people is encouraging.

With a variety of sponsoring agencies working in the camping field today, the basic sponsorship for the camps of the future is assured. There will, of course, be new groups coming into the picture sponsoring their

Above is a model layout for a large organized camp on a lake front site. Below: Riding is a favorite sport in camps having many shaded woodland trails.



own camps, but the great increase in the number of camps will be within the range of the present sponsoring groups.

This question is raised many times: Shall the schools conduct their own camps and build the child's program for the full year? Some school systems already have experimented with the type of program in which camping is included as a definite part of the curriculum. Undoubtedly the number of school systems that will work out this expanded program will increase, but it is doubtful whether a large proportion of systems will work out this program. In the first place, they will continue to have many economic problems that will make this expansion impossible and, second, the general public must be educated to the values of camping before school systems can move out in this new frontier.

Camps Open All Year

Some authorities in school administration have suggested that in order to cut down the carrying load of our schools, both from the standpoint of expense and overcrowded classes, schools build camps to which children should go for one quarter of the year, the camps being used all year. Thus one quarter of the school children would be in camps at any given time. Others have suggested that the schools concentrate on the traditional learning subjects, eliminate extra-curricular activities and function on a six-month basis, having the camps take the children for five months and leaving them with their families for a month.

Both of these plans would partially justify investments in camping facilities. The latter plan would not assist the schools in leveling off their peak loads, but would be more advantageous from the standpoint of camping experience. The children would be in camp during the most favorable seasons of the year and would gain learning experiences that accrue through such projects as gardening and farming. It is evident that children miss these experiences in the present camp setup because they are not able to get to camp early enough to do the actual planting, nor are they there late enough in the fall

to participate in the harvesting.

For the next few years it is evident that the schools will cooperate closely with the camps that already are functioning and that the expansion of camping, whether it is sponsored by schools or by other agencies, will advance on the basis of community needs. There always will be a need for the best types of private camps as there has been for private schools. Federal and state governments are considering the coordination of their diversified interests in camping. It is doubtful that the government will go beyond the phase of supplying camping facilities, except for emergency programs such as the C.C.C.

The training of leaders for the expanding camping movement is presenting a problem of real concern. It is conservative to estimate that a thousand new camps may open each year for the next few years. On the basis of a study that is being carried on in the field of camp personnel, in which more than 5000 camps are participating, the average number of counselors per camp, not including the maintenance staff, is 24. In addition to 1000 directors of these new camps, 24,000 counselors would be required to staff them.

Needs Counselor Training

A few centers are doing adequate work in counselor training. The pity is that so little emphasis is being placed on a problem that is so important. Camps open, and if a director who has a good reputation and training is obtained, he is usually handicapped by being told that he must operate the camp on a budget that will allow perhaps from 5 to 10 per cent of the entire budget for leadership. This means that he must get many counselors who are willing to come without salary and some who will come for small salaries. In most cases this precludes employing trained leaders.

However, many camps, both private and organization, that set aside sizable budgets for personnel are finding it difficult to obtain adequately trained counselors. Many persons are available for camp positions who have school training and degrees but who have not had a camp counselor training course, seminar or the experience that comes

through actual camping situations.

It is heartening to know that universities, colleges and camp organizations are cooperating in counselor training courses and guidance. Surely the training of the leadership for the camping movement must be guided by those who understand the true meaning of the camping philosophy. This directly implies that those who have led and are leading in the camping field must carry the major responsibility in this field of leadership.

Unit Camps Are Indicated

The camps of the future will of necessity be large camps. They will vary with the needs of sponsoring agencies. If the camping experience is to be of value to a large number of children, the large camps of the future must be broken down into unit camps so that the informal programs of the camp may be carried on unhampered by the necessary regimentation of larger groups. The objectives of most camps will differ slightly one from another, but the methods by which objectives are attained will present widely varying patterns. Camps should not be too standardized because the necessary flexibility in program would be stifled.

Will this broad expansion of the camping movement, which seems inevitable, mean that some of the finest experiences of camping to date may be lost? Many of these experiences will be lost if camps are patterned too closely after traditional school systems both from the standpoint of regimentation through larger groups and a repetition of the same methods of instruction that are used in schools.

If a camping experience is to be valuable to a child, the child must be allowed blocks of time in which he may be alone or at least one of a small group. This experience is impossible in most schools today and in many camps. Camp directors and school people have a deep responsibility in the future training of the children that are entrusted to them. It is certain that they can, because of their backgrounds of training and experience and through a close cooperative effort, work out a program that will meet the individual needs of children in a way that has not been possible up to this time.

Setup for Visual Teaching

CHARLES A. GRAMET

PROJECTED teaching aids are relatively recent contributions of science and invention to teaching. They are still relatively expensive, relatively difficult to produce and obtain, relatively difficult to use. A special methodology must be developed to make effective use of them. Nevertheless, their use has increased enormously during the period of the last few years.

In introducing these new devices, administration has been concerned chiefly with matters of economy of purchase and distribution, less often with the use that is made of them. Visual instruction departments, generally, are large administrative units remote from the situations in which the pictures are used. A plan for effectively organizing and administering a program of visual instruction in a large high school is presented here.

The problems that must be solved by a local bureau or department appear to be these:

1. Pictures and projectors must be viewed, recommended for purchase, stored, distributed and serviced.

2. Teachers must be taught efficiency in the use of the apparatus and effective use of the picture aids in the classroom through special instruction, conferences, courses and demonstration lessons.

3. Visual aids must be produced that are adapted to local needs and that supplement the available commercially produced pictures.

4. Records must be kept and the effectiveness of pictures and technics evaluated.

The growth of the secondary schools has resulted in an expansion of the administrative program. We should consider whether the work of visual instruction warrants a separate



For a school of 3000 pupils adequate visual instruction equipment can be purchased for from \$3000 to \$3500. The cost is readily justified in terms of the number of pupils that will benefit from use of these aids each term.

organization. The large investment required, the special problems of distribution and service, the special technics and knowledge required for use and production may justify one.

Central organizations for cities, districts and states have not succeeded in producing effective school programs. We would limit their activities to purchase, distribution and general supervision. The local department in the school would coordinate and stimulate the work of the teachers in the school.

Administrative direction of the department of visual instruction may be delegated by the principal to a

department head who by interest, training and experience is competent to develop the program. Some allowance in released time must be made but this should not interfere with his concern of supervising and administering the department of visual instruction.

Serving under the direct supervision of the chairman is a laboratory assistant. It is a real economy to employ one. In larger schools it is customary to release one or more regular teachers for several periods during the day for visual instruction work. Such teachers rarely have the qualifications, time or interest to do the work satisfactorily. For the same or less money a competent assistant may be employed who will give full time to the job.

This assistant is the hub of the organization. He has the following specific duties: to receive materials from outside sources; to distribute visual aids and projectors to the respective departments and teachers; to assist teachers with projection problems; to store pictures and projec-

The organization and administration of a visual education department in a large high school are told by the chairman of general science courses

tors; to service films and apparatus; to prepare new aids planned by departmental committees; to keep such records as will be useful in improving the use of visual aids in the school; to prepare and care for museum exhibits.

This is an imposing list of duties, more, indeed, than could be expected of one man. In this program pupil aids will be used who will be trained and supervised by the laboratory assistant.

Each department will have a committee of interested teachers who will explore the sources of materials, view and evaluate available pictures and films, suggest means of objectifying their courses of study; correlate available aids with these courses; plan with the help of the laboratory assistant and administrative head new visual aids; plan and give demonstration lessons. For purposes of administration each committee will be represented by the chairman of the department or his alternate.

Since the success of the program will be determined by the extent to which all teachers use visual aids effectively, they will be encouraged to extend their use of them, to experiment with methodology and to make suggestions for improving the aids or the use of them.

Many problems of fundamental importance in this area should be investigated. Such studies should not be delegated or relegated to some remote authority but studied in the school. For this purpose we propose a committee on evaluation. The members of this group must be interested in educational experimentation and have some knowledge of testing and measuring.

Amount and Cost of Equipment

The plan herein described may be incorporated in whole or part depending upon the money that is available. There will be an initial and a sustaining cost.

There are no available standards for estimating the equipment that is needed. Our experience suggests the following: one silent motion picture and one lantern slide projector for each 1000 pupils; film strip adapters for the latter; several opaque projectors; initial libraries of lantern slides,

film strips and motion pictures; storage cabinets; screens and accessories.

For a school of approximately 3000 pupils all the foregoing items in adequate numbers for doing an effective job could be purchased for less than \$3000. If the production of all types of projected pictures is included, another \$500 to \$1000 would be necessary. This figure covers the best equipment needed, not the most expensive. The investment is a good one for all the items are durable, particularly if they are well serviced. The cost is readily justified in terms of pupil contacts, the number of pupils that would benefit from the use of the equipment each term.

By taking advantage of values that sound pictures may offer at this time, a sound projector might be substituted for a silent one at an additional cost of approximately \$300. It may be used for both kinds of pictures.

Sustaining Costs

The sustaining cost is, principally, the salary of the laboratory assistant. This is not truly a cost for the expense of the released time of teachers is saved. Thus at little, if any, additional outlay the superior service of a person especially qualified for and assigned to the job of making effective the program of visual instruction is obtained.

An additional sustaining cost would result for activity in adding and developing new visual aids. The money would be little during the year, no more than several hundred dollars. Such materials are cumulative and after a few years this will be reduced in amount. Replacement costs have been shown to be remarkably low in the extensive program that is being carried on in the senior high schools of New York City.

Three principal considerations will influence the method by which this program may be introduced: the personality of the director, the equipment available and the teachers involved. It does not appear practical to formulate a specific plan. It will vary with the situation.

Infectious enthusiasm of the director and successful use of visual aids by some teachers will help to extend their use. We should prefer to have the program develop ostensibly as

the result of the teachers' demand rather than impose it on them by ukase and regulation. It can be done by the former method.

Rules and regulations will develop as the result of the obvious need for organization and cooperation. The director must, however, be prepared to meet and solve difficult situations and to anticipate and obviate those that may cause friction.

Suitable Printed Forms

Forms are useful in promoting uniformity, in cases in which this is essential, and in saving time and effort in making necessary reports. When they make excessive demand on the teacher's time and patience they are not justified. We should use as few as may be consistent with the demands of good organization and administration. The items called for should be specific and clear; some use should be made of the information that is requested. The following forms seem necessary.

1. Teacher's request for film or slides.
2. Teacher's request for projector.
3. Teacher's comment card.
4. Report of damage.
5. Laboratory assistant's master reservation charts.
6. Laboratory assistant's tabulation sheet to show film use.

Space precludes our describing these forms in detail. No doubt experience will quickly indicate the type of information that may be useful in a particular situation. Other forms may be pertinent. Those that we have listed may be used by the administrative assistant or the department chairman to study the problems of supervision and administration in a department or in the school as a whole.

There is considerable evidence that the projected aids are a unique and important contribution to educational methodology. Through the active participation of teachers in using and planning them we may expect that they will become more proficient in their use in the educative process. The production of these aids has been in the hands of commercial producers who have proceeded, too often, without the guidance of competent teachers. This program should develop teachers.



THE SCHOOL PLANT



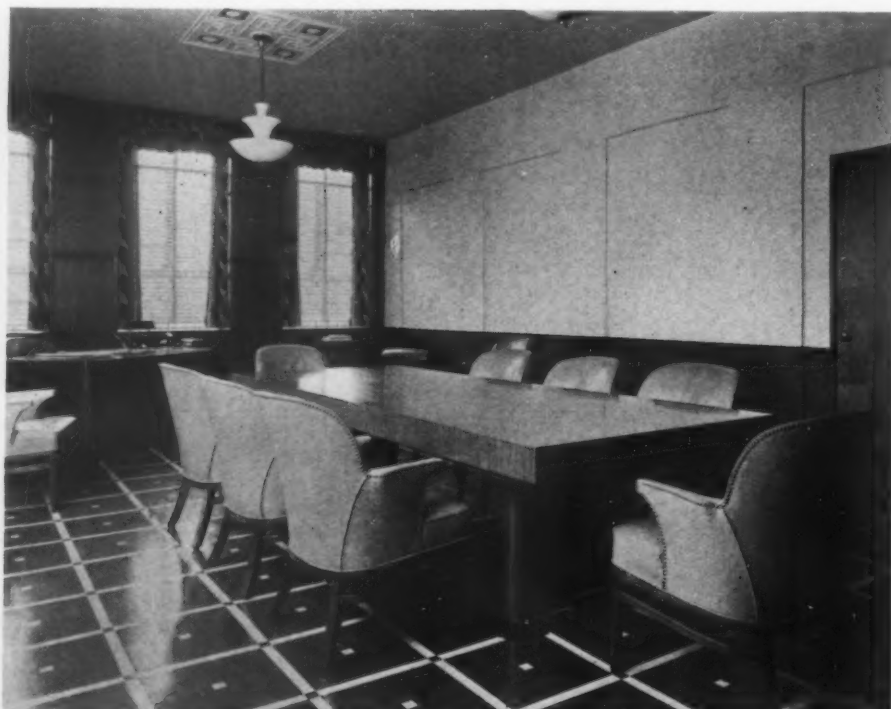
Library windows extend from floor to ceiling and are separated by fluted pilasters. Note that the Grecian key design carved above the bookshelves is repeated in the pattern of the window draperies. Classic bas-reliefs are inset in the walls. The charge desk is in the shape of an ellipse and the tables and chairs are made of oak, especially treated. Below are two views of the combination board room and principal's office. At the left is a close-up of the radio and two-way public address system built into the wall and connecting the office with each room.



Modernism

THE Wellington C. Mephram High School, Bellmore, N. Y., was erected to meet growing demands for improved educational facilities and to relieve crowded conditions in the schools of Merrick, North Merrick, Bellmore and North Bellmore, N. Y. The establishment of a central high school district comprising elementary districts adjoining the village of Freeport on the east had been discussed by leading citizens at various times prior to 1934.

In due time a meeting of the qualified voters of the locality was called and eventually the proposition to cre-





at Mepham

ate a central high school district was approved.

The new school was named in honor of Wellington C. Mepham, district superintendent of the schools in the second district of Nassau County, in recognition of his untiring efforts in the establishment of the district and, more particularly, in appreciation of his ability and thirty years' service as an educator.

Maximum utilization of the building, economy of space, permanency of construction and efficiency of administration, combined with an esthetic environment for the pupils, were factors carefully considered.

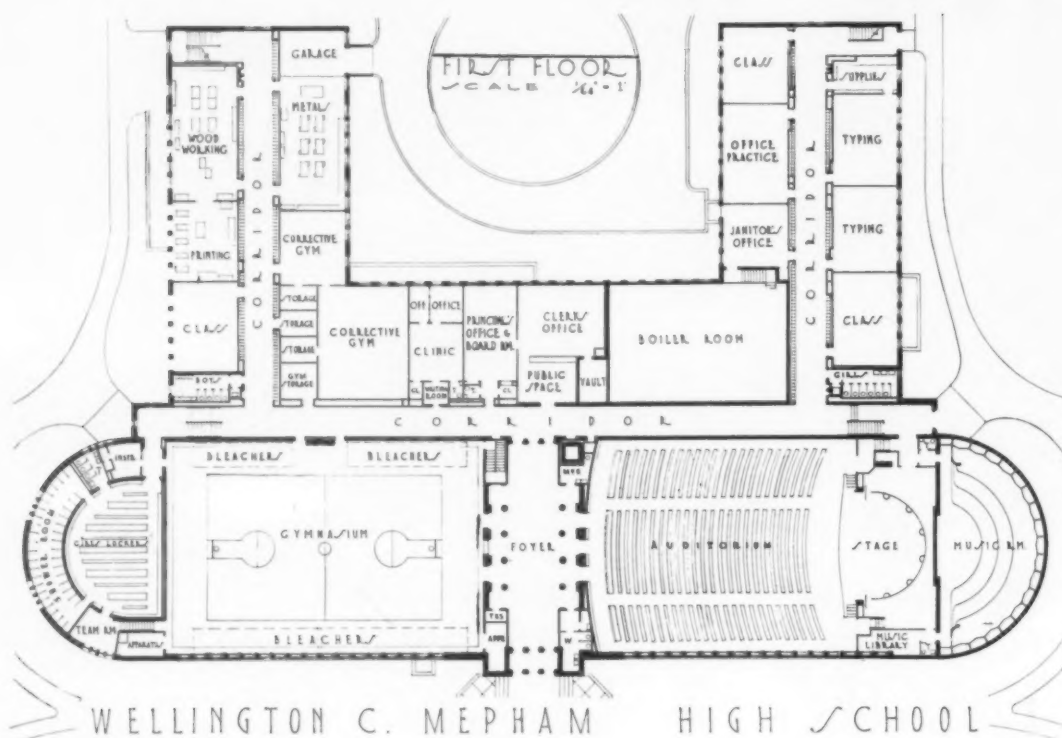
The building, a striking example of modernism, was designed by Frederic P. Wiedersum, architect, Valley Stream, N. Y. Work on the new structure began Jan. 9, 1936, and was substantially completed in August 1937.

There is a quiet magnificence about this building. Clear-cut lines, plain surfaces, creative massing and proportioning instill a spirit of glory without sacrificing basic school needs. Columns of majestic strength line the foyer. The bold background of Pompeian red is reminiscent of a classical age.

The most striking feature in the auditorium, which is entered at the

Built in the shape of a U, the Wellington C. Mepham High School at Bellmore, N. Y., is planned so that both wings may be extended at minimum cost when more room is needed. The music room on the opposite page is placed at the rear of the stage and connecting with it. The hexagonal treatment of the wall space provides ample storage room for instruments and music. Raised platforms seat more than 100 pupils. Below: Columns of majestic strength line the foyer. Color and warmth are introduced by the distinctive background of Pompeian red.





Modernism is the keynote of this building with its front unit styled with curved ends. A three-story tower bisects the front section. Second and third floor plans are on the opposite page.

right of the foyer, is the mural painting, a 70-foot map of Long Island, depicting the outstanding historical and present day points of interest.

To the rear of the stage and connected with it is the music room, semicircular in form; it contains raised platforms sufficiently large to seat more than a hundred pupils with their instruments. This room is

equipped with closets for instruments and music.

To the left of the foyer is the gymnasium, 108 by 72 feet, furnished with modern apparatus, including folding bleachers to accommodate 600 persons. It is divided into two sections, for boys and girls, by manually operated doors.

Locker and shower rooms are con-

nected with each. In planning the building, health was emphasized; in addition to the main gymnasium, two corrective rooms and a clinic are included, with provision for medical examination and oral hygiene services.

The location of the physical education locker rooms and of the music rooms at the end of the building

To eliminate noise the locker room for boys and girls is placed conveniently at the extreme end of the building and adjacent to the gymnasium. An interesting arrangement of locker rows utilizes all the space without crowding. Note the ingenious location of the lockers on the first floor plan, above.

Flanking the locker room is the shower room with its rows of tile showers arranged along opposite sides of the semicircular room.



All photographs by Charles E. Knell, Massapequa, N. Y.

eliminates the possibility of disturbing the academic classwork.

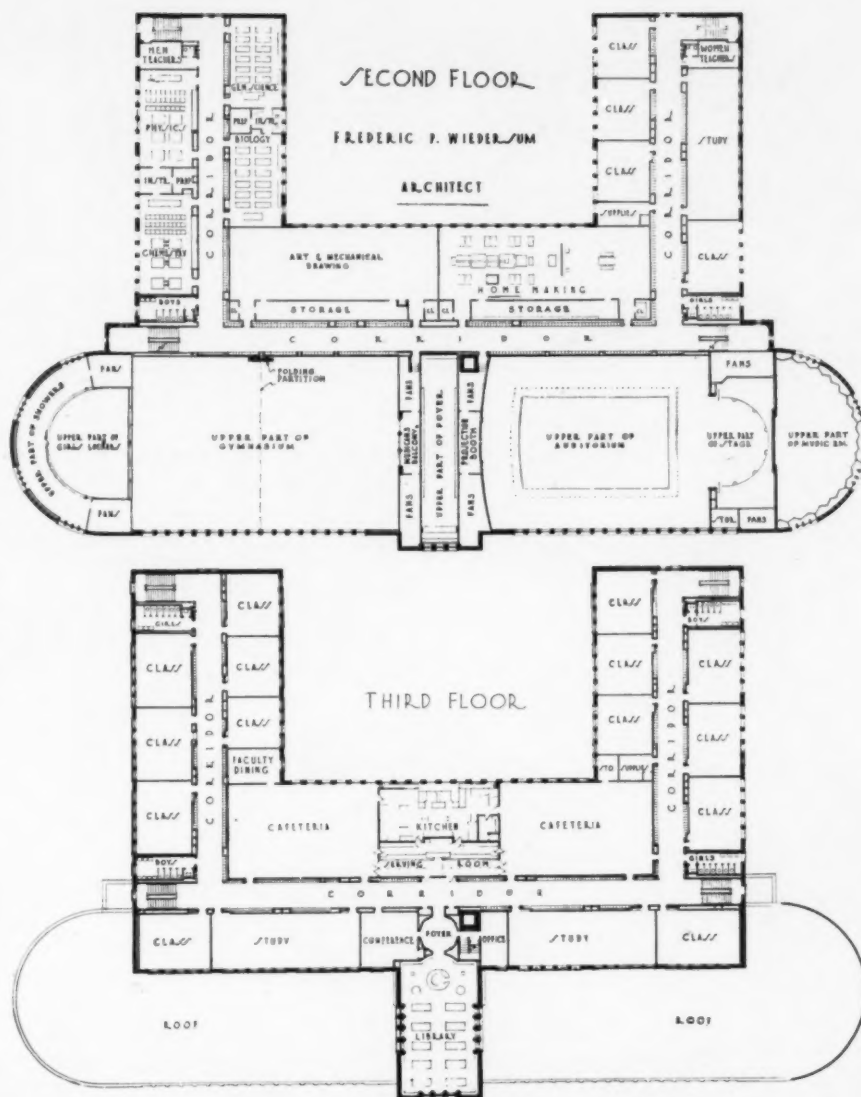
In the basement, which is connected by a ramp with the athletic fields and the entrance drives, are shower rooms for home and visiting teams. Space is also provided for the storage of approximately a thousand bicycles.

Three oil-burning boilers furnish the heat for the building, with provision for two additional boilers when needed. There is ample room in front of these heating plants for the removal of tubes as the occasion demands.

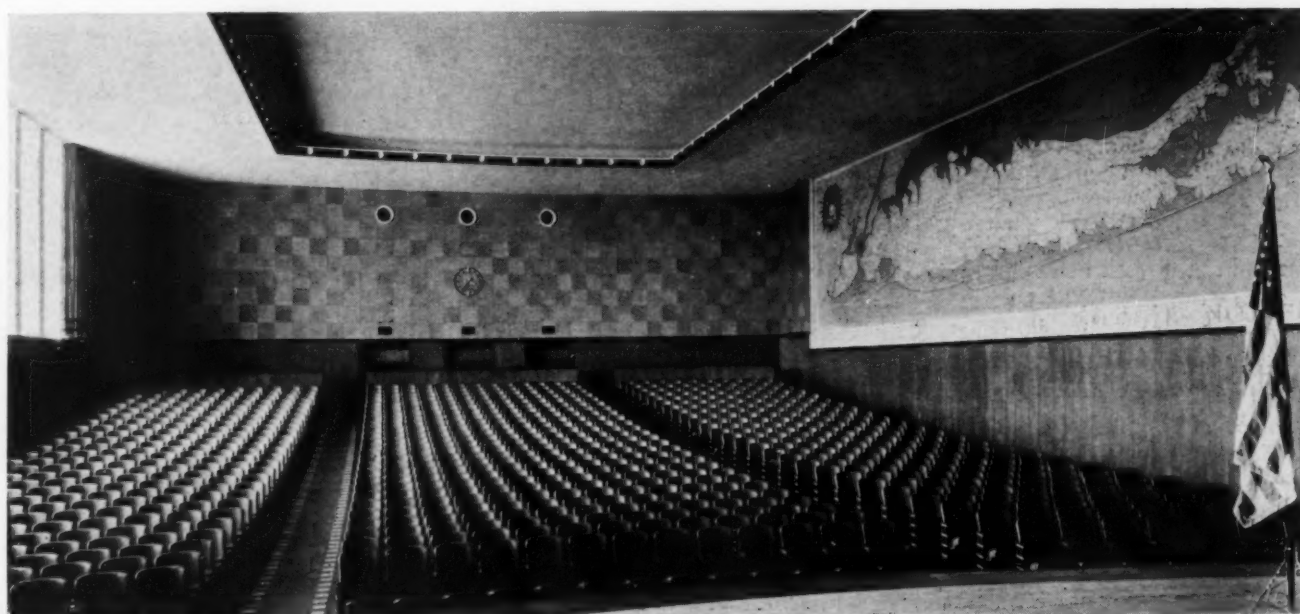
An art and science museum, to occupy a space in the basement, 22 feet by 40 feet, is also planned for the use and interest of pupils and the public.

The administrative unit is located across the hall from the end of the foyer. The main room contains equipment for a clerical force much larger than now employed and a vault large enough to afford many years' service. A combination board and principal's room adjoins the main administrative unit. Other facilities in this unit include radio service and a two-way public address system which connects each room with the office.

The commercial department is situated in one of the first floor wings of the building, and the industrial arts quarters are located in the other. If future developments indicate an enlargement of either department,



A map of Long Island, executed as a mural painting, extends for 70 feet along one wall of the auditorium and forms its most interesting decorative feature. The room is acoustically treated and ceiling lights are recessed.





A spacious room is provided on the second floor for home economics. The unit for cooking is placed at one end, while tables and machines for sewing are located near the row of windows at one side.



The commercial department, located on the first floor, has complete facilities for instruction in all types of office work. One of the two typewriting rooms, an important unit of the section, appears above.



Manually operated folding doors divide the gymnasium into separate sections for boys and for girls. Placed along the side walls are folding bleachers.

the particular wing in which it is located can be extended. If increased facilities are required in more than two branches, both wings may be extended at minimum cost.

On the second floor several classrooms, one 80-pupil study hall, a four-room science department and spacious art and home economics facilities are provided.

On the third floor are the cafeteria, the library, two 80-pupil study halls and classrooms. The kitchen,

with service rooms connected with the hall, divides the cafeteria into two sections, each seating 250 pupils. The service rooms and kitchen are so arranged that they may be completely closed off from the two sections of the cafeteria, making possible the use of the cafeteria space for periods of the day when lunch is not being served. A faculty dining room is also provided.

The library, dedicated to William Christy Sr., an ardent supporter of

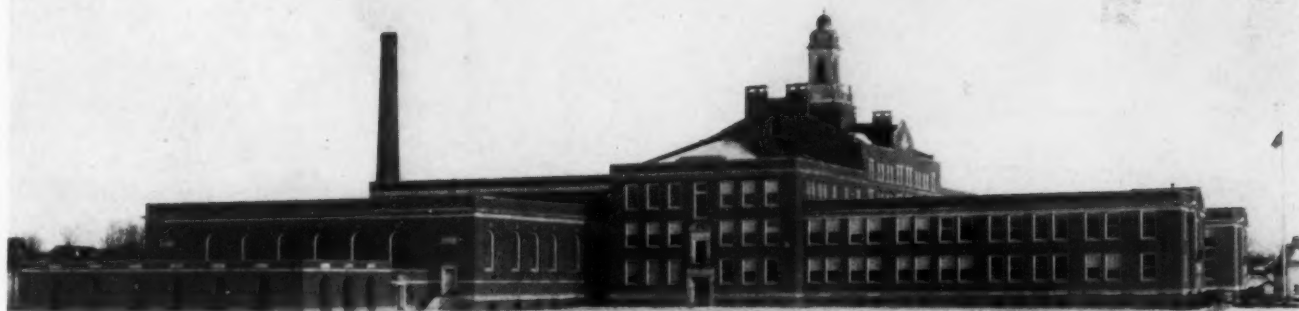
the Central High School and the first clerk of the board of education, is in the tower of the building directly across the hall from the cafeteria service room.

Walls in the library are painted in four tones of yellow, the deepest shade giving way to pastel and ivory tints at the top. These colors contrast with the olive green of the ceiling. Grille work inside the dome serves as the ventilator. Tall fluted columns correspond in design to the carving above the shelves. The blue in the sculptured panels matches the blue in the imported drapes. The charge desk is elliptical and is made of especially treated oak, as are the table and chairs.

Location of the library in the tower permits the utilization of a part of the building that often is wasted. It affords excellent natural lighting and a unique arrangement of library equipment.

The building is placed upon a 21-acre site, laid out to provide adequate outdoor facilities for all activities called for in present day health and athletic programs. The entire cost of this building and equipment, together with the site, was \$860,000.

Rochester's in the Swim



FRANCIS R. SCHERER

AN INCREASING number of high schools are being built each year with provisions for an indoor swimming pool. Educators may hold differing opinions as to the value and importance of swimming as a part of the curriculum, but some high schools make it a required subject, exemption from which requires certification from the family physician, and some colleges require students to pass a comprehensive swimming test before they are permitted to graduate.

In the school system of Rochester, N. Y., eight high schools are equipped with swimming pools. In each of these schools from 25 to 50 per cent of the time that each pupil gives to health education activities is by requirement devoted to swimming. Each class is divided into three groups according to swimming ability: beginning, intermediate and advanced.

A boy or girl is assigned to one such group after demonstrating his ability to pass the standard test for that group. Girls in the different groups are designated by the color of their bathing caps. Each group is divided into squads, each squad being placed under the care of a capable leader. The majority of classes contain a number of advanced swimmers who may be selected as squad leaders.

In the left foreground, the natatorium of John Marshall High School, Rochester, N. Y. The wing with circlehead windows contains gymnasiums, exercise, locker and shower rooms.

All eight pools are 30 feet wide and 75 feet long. The shallow end is 3 feet deep, tapering to 3 feet 10 inches in 35 feet. At that point a red tile band is inserted at the bottom of the pool to mark the zone beyond which beginners may not go. This is a change from earlier design in that the length of the shallow portion of the pool has been increased to provide more area for the beginning and intermediate groups. The deepest part of the pool is 9 feet, that being 14 feet distant from the so-called deep end. It slopes from that point to a depth of 3 feet 10 inches in one direction and to a depth of 7 feet in the other.

These pools, like most of the indoor artificial types, are of monolithic concrete construction, having bottom and sides lined with white tile. The walls are designed as cantilever slabs and stand exposed in the filter room, which is the space below the pool deck. Likewise, the underside of the bottom slab stands exposed so that leaks may be readily

detected and repaired. Nine underwater electric lights are placed in each side of the pool, the center of these being 2 feet from the bottom. They are for safety and can be thrown on by anybody in the natatorium by means of an emergency switch placed at either end of the room.

On the wall of the deep end of the pool there is a 7-inch ledge of non-slip tile so that the swimmers may stand on this and rest without it being necessary to climb on to the deck.

An emergency alarm signal, electrically operated, is installed in the natatorium with a large placard posted over the signal button stating that it is to be sounded only in case of trouble. Pressing the button instantly sounds an alarm in the natatorium, in the gymnasiums and in the school administration quarters. In the event of trouble, everyone in the pool immediately gets out and members of the health education staff not in the natatorium at the time rush in to lend assistance. The principal or vice principal also hurries to the scene.

In August 1935 a natatorium in the form of a wing annex was added to the John Marshall High School, the main building of which was nearing completion. Complete costs for



Looking toward the deep end of the pool. The shallow portion of the pool has been increased in size to provide greater area for beginners.

this natatorium, which now is in operation, were:

Mason and carpenter.....	\$41,365.00
Roofing and sheet metal....	989.00
Tile	3,950.00
Painting and finishing	463.00
Plumbing	3,215.00
Heating and ventilating	15,458.00
Electric	2,833.50

Total \$68,273.50

These figures include fireproof construction, highest grade equipment and such items as bronze windows and doors, spectators' gallery accommodating approximately 200, separate fan room, three high-pressure filters, sterilizing equipment, subsurface lighting, emergency signals and acoustical correction. Although this pool is equipped with ultraviolet ray sterilizing equipment, there are pools in the system equipped with chlorine, with ammonia chlorine and with ozone.

Usually the sanitary department of the state government exercises control over the construction and operation of swimming pools. Among more recent requirements are provi-

sions prohibiting interconnection of drain with the sanitary sewerage system, this to prevent any possible discharge of sewage into pool. Likewise, there is the requirement that

the water pump introducing fresh water into the pool must be so located and arranged that the water will not drain or siphon from the pool into the public water supply system if the pressure of the public system is reduced because of heavy consumption during fires or temporary closing of valves.

The method of meeting this requirement in Rochester has been to introduce fresh water into the suction pipe of the recirculating pump through a pipe line which is extended in a vertical loop to an elevation of about 35 feet above the scum gutter of the pool, this height being above the limit of siphon action.

To make sure that the water in the pool is maintained at all times within the requirements for proper sanitation, regulations are provided by the state and municipal authorities having jurisdiction and by the board of education. These have to do, first of all, with the design and equipment of the pool, the number of bathers and the filtration and sterilization of the water.

It is obligatory that the data from analyses be reported periodically. In the Rochester system the water in each pool is analyzed each week by the board's chemist-bacteriologist. In addition to this, the city's health bureau makes each week an independent test of water in each pool.

Towel System Cuts Pupil Losses

A TOWEL system has been installed at the Henry C. Conrad High School, near Richardson Park, Del., to prevent the spread of diseases, such as athlete's foot, which are prevalent in shower rooms. Another reason for this service was the complaint of so many mothers that their sons had lost as many as a dozen towels during the year.

This towel system is simple and yet it is invaluable to a physical education department, according to Donald E. Harper. Each pupil wishing to rent towels for the year deposits 15 cents to cover the loss of a towel. In the event that there is no loss the deposit is returned at

the end of the year. This service costs the pupil 3 cents a week. The money is collected six weeks in advance, a sum of 18 cents. The yearly rate is \$1.08, provided there is no loss.

These towels are accounted for by use of a chart on which are posted each boy's name, the date the towel was taken and the date it was returned. No clean towel is issued until the soiled one has been returned. Locker inspection frequently provides a general checkup.

Towels are supplied and laundered by a commercial laundry. More than 50 per cent of the pupils use the service and it is growing.

Meet the Custodian!

LIKE the teacher, the custodian plays an important rôle in the program of instruction. He is responsible for the health and comfort of the teachers and pupils through the control of ventilation, temperature and humidity in the building, conditions essential for efficient teaching. He also is responsible for cleanliness and sanitation, leading to high standards of respectability and health; for the safety of pupils and teachers through careful maintenance of equipment and the buildings or grounds; for the care of costly equipment and the efficient use of operating supplies, and for his influence in molding the character of pupils and in maintaining good will in the school and community.

For these reasons it is imperative that high standards in the selection of custodial personnel be established.

A minimum age of 25 years and a maximum age of 45 years are considered reasonable for new employees. Younger persons lack stability and judgment and frequently are not prepared to accept the custodian's position as a lifetime job. Frequent changes in personnel result. Older men are interested only in obtaining a livelihood and do not look at the job as one requiring training and skill. They usually are slow and frequently are incapable of doing a reasonable amount of work because of physical defects. They may have developed routine work habits that hamper efficiency.

Since aged persons seldom quit their jobs voluntarily and since the school cannot contribute to the social problem by discharging them, the continual employment of aged persons would in time lead to a crippled, inefficient operating force. The establishment of a custodians' pension and retirement fund would solve this problem.

The varied duties of the custodian require agility and strength. Furthermore, the close contact of the custodian with the pupils demands that he have a clean and healthful body. A physical examination should

RALPH L. MULLER

The assistant superintendent of schools, Ferndale, Mich., gives standards in the selection of high-type custodial personnel

be a prerequisite to employment and a health certificate should be demanded of every custodian. Few schools have as yet reached this stage; however, examinations would likely eliminate many persons suffering from crippling defects and communicable diseases.

Close contact with pupils and teachers necessitates the employment of men who have had some education. The custodian should be able to speak and act in an acceptable manner and he should be able to read, speak and write English with correctness and accuracy. The latter attributes are essential in reading reports or orders and in keeping records. A minimum of an eighth grade education, with preference given to those of higher education, should be required.

Because of the custodian's close contact with pupils, teachers and the public, his character, personality and attitudes must be carefully considered. It is said that the custodian's personal influence upon elementary school pupils is nearly as great as that of the teacher for he is often the only man with whom the children come in contact during the school day. Habits that are socially undesirable must be avoided. The custodian also should be of pleasing personality and courteous, for the school often is judged on the basis of the janitor's relation to the public.

The custodian should be orderly, clean and neat in personal appearance. It is difficult for children to respect the unshaven, unkempt and ill-clothed individual. The appear-

ance of a man reflects other qualifications. Applicants for a job who appear for an interview minus a necktie, with hair unkempt or face unshaven show poor judgment or a lack of propriety.

Since it is difficult to obtain trained custodians, attendance at custodians' short courses should be encouraged, and in some cases it might be advisable to require all newly appointed custodians to attend. Definite training also might be made a prerequisite to promotion. Young employees should be encouraged to look upon their jobs as a respectable occupation requiring training and skill. Preference should be given to those who attempt to improve themselves.

Adaptability to a job is of primary importance. Many occasions arise in which a custodian is called upon to meet an emergency or in other ways to exercise judgment. A good custodian must possess good common sense. He must be able to think for himself and to act in terms of his own ideas. He must be able to "see things." When things go wrong he should correct them without having them directed to his attention. He should be a man who is mechanically inclined and who has some natural or special abilities along the line of custodial service, so that he may be able to perform the many odd jobs necessary in this line of work. In the course of a year's work the custodian has occasion to make use of at least an elementary knowledge of many skilled occupations, including that of painter, carpenter, engineer, mechanic, plumber, electrician, mason and landscape gardener.

Finally, the custodian must be a responsible, dependable individual; one who can be relied upon, who will meet the emergencies of his job, and who can be trusted not to fail when needed. He must appreciate the importance and the function of the schools and the responsibility of his position.*

*From an address before the National Association of Public School Business Officials, Battle Creek, Mich.

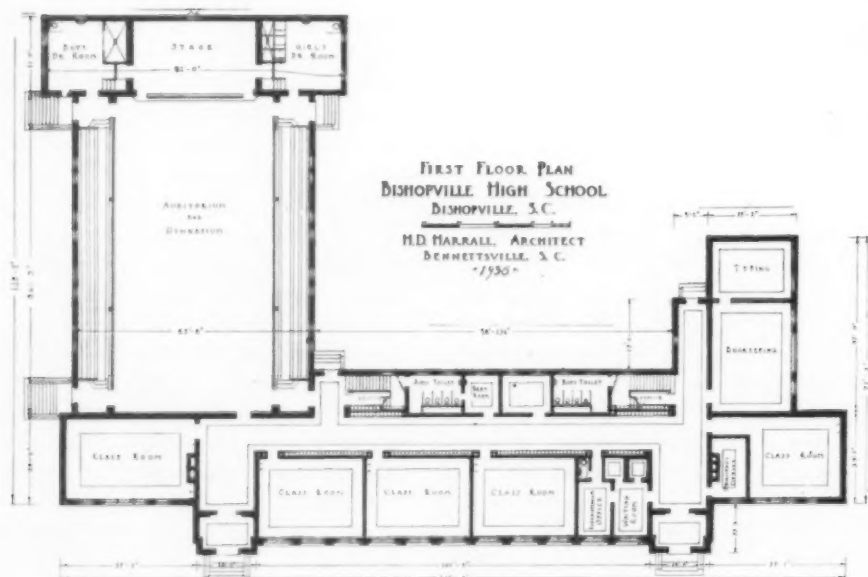


Two in Bishopville

C. M. STUART

BUILT from P.W.A. funds at a cost of approximately \$75,000, including \$10,000 worth of equipment, the Bishopville High School

Twelve teaching units are included in the Bishopville High School building, cost of which totaled approximately \$75,000.

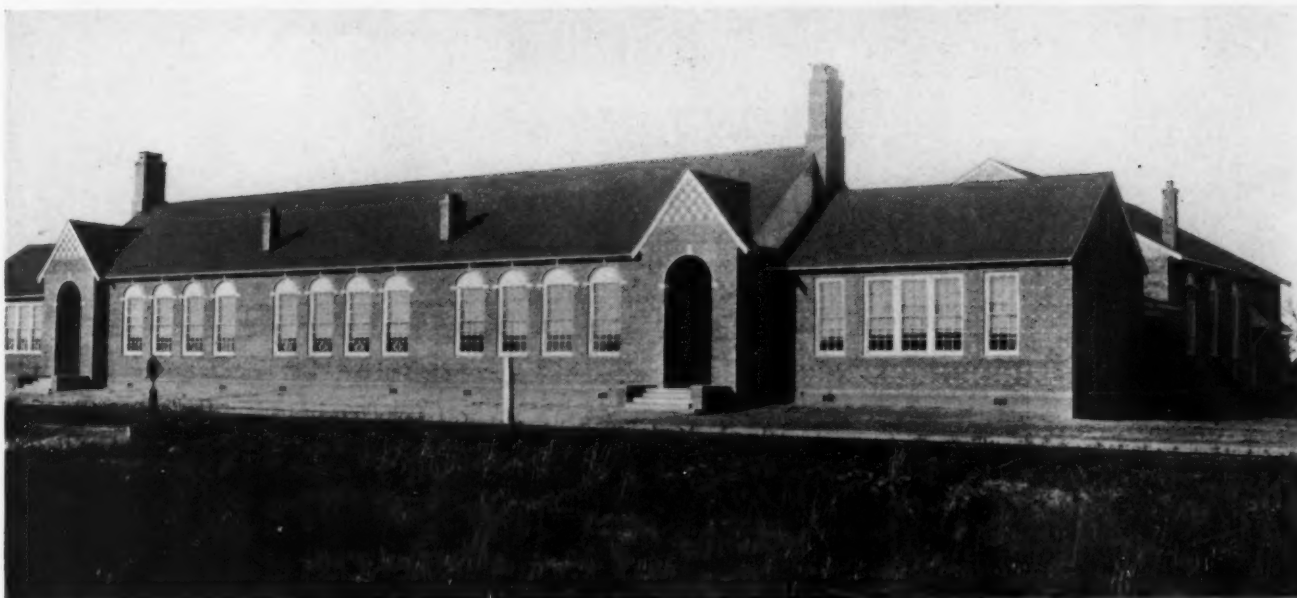


The combination auditorium and gymnasium occupies one wing. Flanking the stage are two dressing rooms used both for plays and for the gymnasium.

building in Bishopville, S. C., is now housing more than 300 pupils.

Twelve teaching units are provided, including a well equipped two-divisional commercial department, a home economics department that is amply spaced and a science laboratory equipped for 30 pupils to perform individual experiments. There is also a library, 22 by 60 feet, which is equipped with charge desk, magazine rack, fifteen tables seating from 60 to 80 pupils and other necessary library equipment. This library is used for a study hall.

Washrooms for boys and girls are on both floors. Between the washrooms are small rooms used for rest rooms, a music studio and storage room. Behind one wing of the building is a combination gymnasium-auditorium which seats 1000 people when used as an auditorium and contains stationary seats for 400 for gymnasium events. The dressing rooms are for both the stage and the gymnasium. The boys' dressing room has an outside opening to the baseball



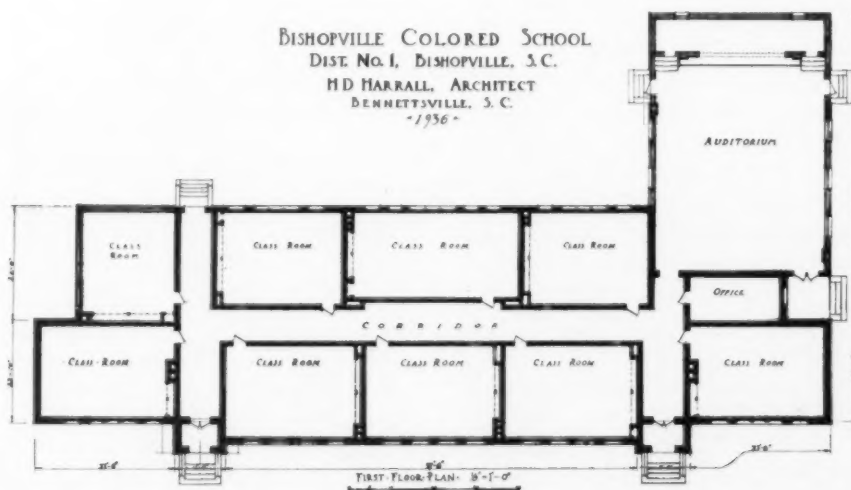
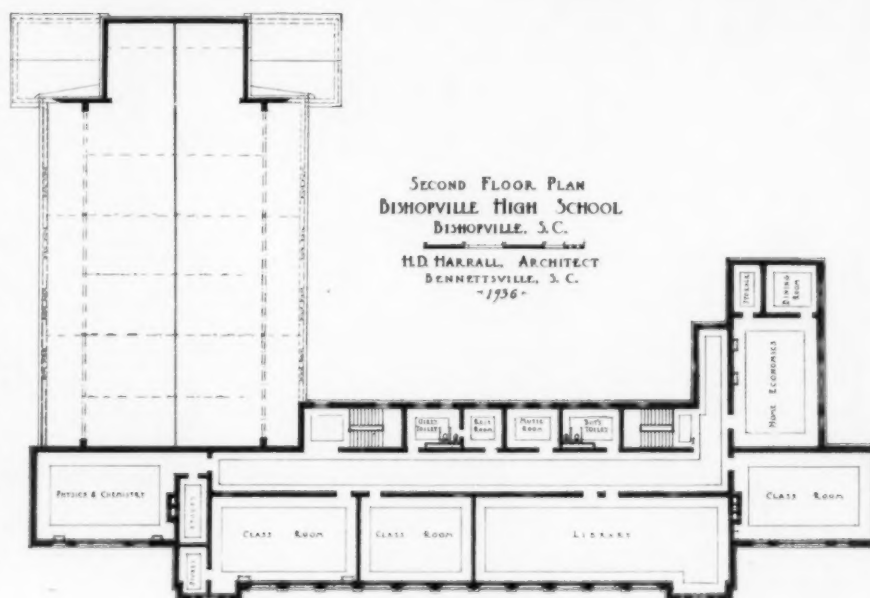
Finished in brick veneer, the Bishopville Colored School was built in two units which can be added to when necessary. It contains eight classrooms.

and football field. Each dressing room is equipped with lockers.

The long corridor, which extends from one front opening to the other, has built-in lockers.

The building is heated by steam and the foundation is so elevated that there is a natural drainage from the boiler room.

Also in Bishopville is the Colored School building, which was built in two different units. The first part was built with P.W.A. funds and contains eight classrooms and a principal's office. After this portion was completed, the old building was destroyed by fire and another room and an auditorium were added from insurance funds. The entire building cost approximately \$24,000. It is brick veneered and is of the type that can be added to at any time.



Above: The second floor plan of the high school shows the location of the science laboratory, which has sufficient equipment so that 30 pupils can conduct individual experiments at one time. A separate unit is provided for teaching home economics. Below, left: Floor plan of the colored school showing the auditorium and an extra classroom (shaded part) that were not a part of the original structure.



Pointers on Paint

H. ESTELLE HAYDEN

THE David W. Smouse Opportunity School for Physically Handicapped Children in Des Moines, Iowa, which was presented to the city by Doctor and Mrs. Smouse, is maintained by and is part of the public school system. The children who attend this school because of physical handicaps require special care. Physiotherapy treatments, violet ray and massage in the warm water tank are given by a trained attendant who works under the direction of a child specialist. The corrective gymnasium adjoining contains stall bars, rings, walkers and a special triple full-length mirror for helping correct curvatures and other physical defects. The play-roof up in the tree tops, with its swings and bars, is an ideal spot where play, properly supervised, strengthens limbs and puts color in pale cheeks.

Do you remember the dear old schools of childhood days with their dingy brown or gray painted wood-

work or, if very elegant, golden oak? Good substantial schools they were, some of them well built of good material, but quite innocent of beauty or of childhood interests. The walls were frequently a dirty yellow or yellow-orange; or perhaps a durable green absorbed what little light entered through the high silled windows. If sills were low, children might look out and see a squirrel and be diverted from their more serious tasks.

Every school in those days had its steel engravings of George Washington and Abraham Lincoln—good men, men to respect and emulate, but not very decorative! Many of

Work becomes pleasure in the patio above, as the pupils in this school for physically handicapped children in Des Moines, Iowa, gather around small tables and listen to the tinkling fountain.

the old steel engravings and sepia prints of early days, now stained and dusty, still hold their honorable positions as if to defy the fine color prints of this frivolous age to displace them.

Picture, then, a beautiful new school building in which 250 children, deaf, crippled, nearly blind, afflicted with heart disease, malnutrition or nervous disease, laugh,



play, work happily and study the regular work of the city schools.

On entering the building one is astonished to see not the traditional schoolroom with its standard yellow walls but a beautiful home, colorful and joyous, where even the wheeled chairs are painted soft rose, violet, blue or golden. Wouldn't you rather ride, if you had to ride, in a lovely rose-colored chair than in an ordinary oak chair? Or would you prefer violet or blue?

In this school, the corridor wainscot is of varied shades of brown, tan and yellow glazed tile set random and inset with patterned tiles designed especially for the school. The wall above is of a modified straw color, lighting the long reaches of

the corridor and contrasting gaily with the turquoise blue of the lockers. The floor is of varicolored asphalt tile, soft reds, greens, blues and gray with a bit of black. The window sash are the color of bitter-sweet berries and a double line of turquoise blue tops the tile wainscot.

Corridor walls are hung with fine paintings and good prints, colorful and gay. The clock is set in a delicately wrought iron frame especially designed and made for it, and along the way interesting wrought iron signs point to the office of the principal, one of the most attractive rooms in the building and one that beckons lovingly to every child.

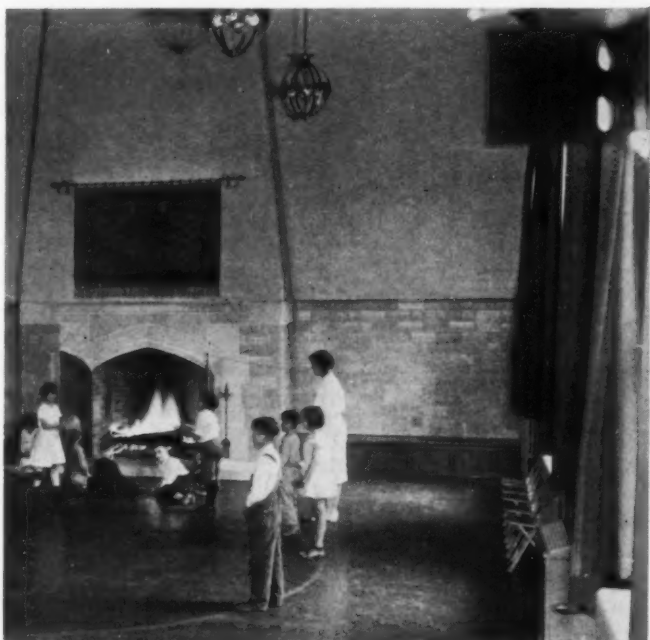
Across the corridor from the entrance on the far wall of the patio

is a fountain surrounded by growing plants, ferns and oleanders in pink bloom. At either end are benches with crimson cushions, and just above them brilliant tiles set in the wall give a touch of Spanish splendor. The floor is of red tile, the rough walls of Spanish yellow, while the cornice combines dull red and yellow in truly Castilian fashion. In this room work becomes a pleasure, and here you will frequently find groups of children sitting around one of the gay tables listening to the twinkling waters of the fountain or watching the goldfish at play.

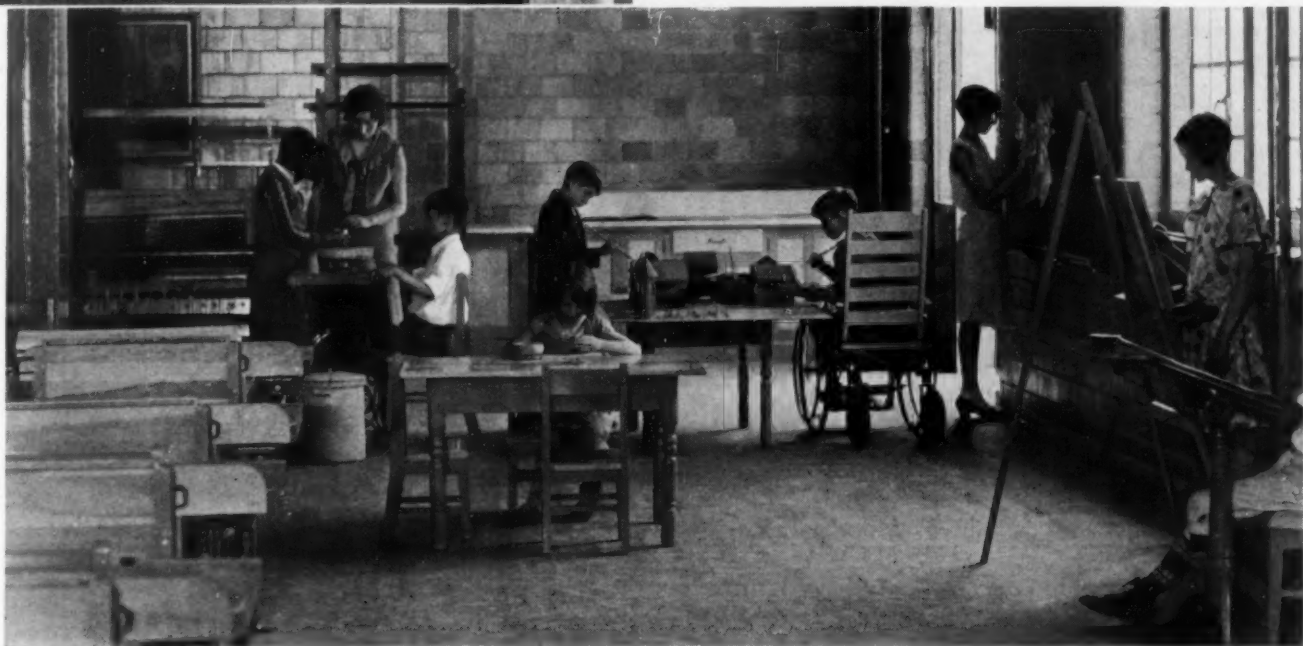
Windows filled with flower boxes open from the patio to the ramp which winds around and up to the office of the principal. Set in the window frames are gay pictured tiles. Looking up through the window openings to the blended blue wall of the patio beyond, one is reminded of the skies of sunny Spain.

Inside the ramp are double railings, painted a rich dark green, which after five years' use are showing flicks of vermilion through the green and hold further surprises in the way of another undercoat as yet uncovered.

The suite of rooms for the deaf children is papered with fine washable paper and the woodwork is enameled. That of the tiny children



Left: An open fireplace with handsome wrought iron gates adds distinction to the playroom. Rich red homespun curtains afford a striking contrast to the soft tan walls. In the art room below the children weave, model or construct houses as their interest dictates. All activities are directed by a sympathetic teacher.





is in soft grayed green with contrasting panels of much grayed rose, echoing the bit of soft rose and green in the wall paper. The blackboard and bulletin board are also rosy.

The room opening from the primary room for deaf children is enameled in soft blue-green with self-color panels of lighter value, and the third room is enameled in soft yellow-green. Cupboard linings, blackboards and bulletin boards and touches on telephone and window sash in this room are of orchid.

Rooms for the children with poor eyes are done in soft greens and the mossy green blackboard tilts forward to avoid any glare.

The playroom with its dull red asphalt tile floor, permanently inlaid with rings and game symbols, offers opportunity for sugar-coated exercise, encouraged and carefully guided by well-trained teachers who plan the right kind of exercise for each child. The soft tan walls, the open fireplace with its beautiful wrought iron gates, the Polish Kelim above and the rich red homespun curtains present on snowy and rainy days a charming setting for the story hour.

The art room with its varied equipment offers opportunity for many kinds of work. Here children

weave, model, paint, construct houses or masks as the interest leads, while the sympathetic teacher guides and teaches.

At the close of the morning comes the lunch hour. The children's lunchroom is the gayest room in the building. It is a sunshine room, in spite of the fact that it is tree shaded. The walls are of rich golden yellow, the furniture is Colonial maple with seats of the chairs in turquoise blue to match the small amount of woodwork in doors and windows. The windows are hung with orange fish net and the gaily stenciled beams on the ceiling recall the beauty of San Mineato.

Much of the furniture in this building was made in the shops of the schools by the shopmen assisted by pupils. The corridor tiles and the wrought iron were designed by Bernice Voshelle Setzer, assistant director of art of the Des Moines public schools.

In planning the decoration of these rooms, it was the aim to make them colorful, pleasing to the eyes of the children and so varied that no two rooms near each other are alike but adjoining rooms are harmonious.

In one group of rooms the woodwork is stained; in another it is en-



The gayest room in the building is the lunchroom. A rich golden yellow paint is used on the walls and the Colonial maple chairs have seats of turquoise blue to match the woodwork. Corridor wainscot is shown above in detail. Glazed tile is inset with patterned tiles.

ameled. In one suite washable wall paper is used, and in another, a rough patterned plaster. All floors are of asphalt tile set random or in pattern. In the playroom the floor tile is inset with circles for use in games.

After the school was finished and the equipment, children and teachers installed, quite a bit of paint was left over. This we decided to use in other schools less fortunate than Smouse. We began with two poor little schools in the less prosperous part of the city, dingy old places with grimy walls and grubby woodwork. First of all, the walls were put in shape, unused moldings and hooks came down, unused furniture was removed or repaired, painted, restored and made usable. Then came the painters who, working from outline sheets indicating carefully planned color schemes, individual for each room, put on the undercoats. The undercoats are quite important, for unless the undercoat shrinks in the same degree as the finished coat, the paint will check.

The corridors in most schools are inclined to be dark unless one side is windowed. Dark corridors can be lightened greatly by proper selection of paint. In Logan School a warm sun tone was used on the walls of the corridor, with a light ivory ceiling. The woodwork was painted a softly grayed apple green with panels

a bit lighter than the stiles. The window sash at either end of the corridor and the divisions of the door panes were enameled a rich red-orange, a color called bittersweet. The clock and newel posts were painted green to match the woodwork and, touched with the bittersweet, the effect is delightfully gay. Incidentally, the electric light bill is materially decreased.

An old basement room on the southeast corner of the building receives its share of light; it was made into a green room with rich rose window sash. The walls were painted with a flat paint, yellow-green lightened and grayed. The ceiling is of ivory slightly tinted with green and the woodwork is a soft gray-green slightly tinged with yellow. The beauty of this room makes the meeting of the P.T.A. a social event rather than a duty.

Some of the loveliest rooms are the kindergartens, with walls of soft peach tones in north rooms or rosy orchid in south rooms. The ceilings may be a rich ivory or at times a touch of green is added. Great care is taken in mixing exactly the right color for each room. The color of walls and ceiling must not be too intense or the room looks garish. The wall must not be hard on eyes for after all these are schoolrooms. The quality of light coming in from outside must be carefully considered. A gray stone wall reflects a different light than does a red brick building adjoining or across the road.

One of the schemes that is particularly attractive is the yellow-green and orchid one. This scheme is most successful when planned for a room having natural oak woodwork, which we do not paint. The walls are a very light soft yellow-green or an ivory carried just off the yellow by adding a touch of green. The ceiling is a rich ivory and linings to cupboards, ornamentation on clocks, electric fixtures and window sash are of orchid. Fixtures may be a bluish orchid and the window sash, a rosy orchid for variety.

Dark north rooms are frequently made sunshiny by painting the walls a straw color and the woodwork honey color. If there is to be a wainscot, it should be darker than the wall. Such rooms are a bit mo-

notonous and warm unless relieved by a contrasting color. A bit of gray-green in the window sash or a line of black or a double line of black and dark blue heading the wainscot will relieve this. Each room presents a different problem, if one is to preserve its individuality and distinctive character and bring out its personality.

If there is much stained or natural woodwork in cupboards and cases, its color becomes a dominant factor in the scheme. When cases are painted, care must be taken, unless the room is unusually large, to keep the color fairly neutral without destroying its character.

As you can see, quite a bit of green is used on woodwork and even on walls in bright sunny rooms. Walls must have the quality of lighting a room; hence, suntone, straw color, light ivory, yellowy peach, yellow-green or other colors which reflect light are those most frequently used. The blue-greens or greens absorb light; therefore they should be reserved for the rooms that are well lighted by windows. A touch of contrasting color on the window sash or a line of color above the wainscot often saves an otherwise monotonous situation and gives a touch of gaiety to the room.

The reaction of both teachers and children is most interesting. They take great pride in the appearance of the rooms. Frequently little children will point to the walls with grimy fingers not quite touching them and say with awe in their voices, "It's pretty, isn't it?" Teachers frequently respond with new gowns to match or harmonize with their rooms. Old stained pictures disappear and new harmonious hangings take their places. Desks are tidied up and flower arrangements take on distinction.

When painting rooms, the quality of paint is important. Little or nothing is saved by the purchase of cheap paint. It is surprising to see how many things can happen to paint of poor quality. The walls may check within a few weeks or the paint peel off. The color may fade or change to another color unexpectedly. When using color in oil, we endeavor to use nothing but permanent pigments and to mix them in such a way that



A delicately wrought frame has been designed especially for the hall clock, located for visibility.

they do not deteriorate with chemical changes.

In Des Moines this work has been so successful that now when a room is to be painted it is referred to the art department, the room visited, the color scheme worked out in detail and recorded on blanks, one for the head painter, one for the person in immediate charge of the painting and one to be filed at the school board office. If repairs have to be made, there is a record ready for reference.

The annual report of the art department for 1936 showed 495 classrooms, closets, storerooms and other rooms painted during the year. A careful record is kept of the kinds of paint used and this record shows that one gets what one pays for and it pays to use quality paint. But the largest dividends are derived from the satisfaction that comes from taking children from ugly surroundings and housing them in beautiful rooms which are comfortable, inspirational and joyous. That is, after all, an important part of education.

"Lights, Please!"

FRANCIS M. FALGE

IN THE lighting and control layout of small stages, individuality plays a prominent part, especially when it comes to using the equipment in actual lighting production. In many cases, however, differences in technic, while playing a major part in the final effect, have a minor influence on the actual equipping of the stage. There is, therefore, no need to overlook the many advantages of a semistandardized lighting and control plan. When a definite plan is available the lighting equipment need not all be purchased at

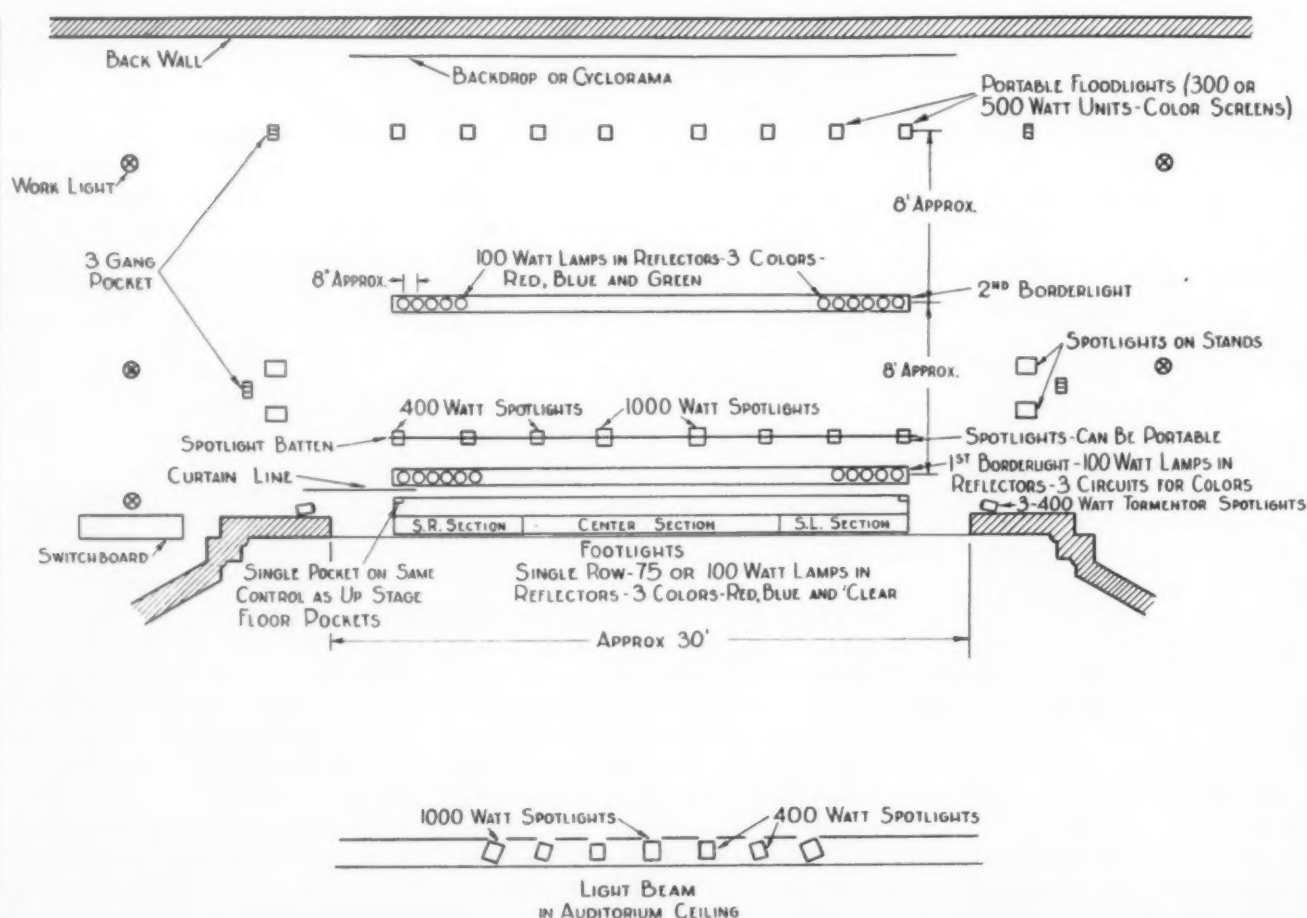


A simple arrangement of lights is used on this school stage to enhance the scenery, which was made by the pupils. Below is a suggested lighting layout for the small sized stage, utilizing footlights, spotlights and borderlights.

once but can be bought as funds become available.

The accompanying sketch shows the general plan and the layout that will meet the requirements of the average small stage. The layout sug-

gested is an. ply flexible, is consistent with low cost and provides for adequate general and local lighting and highlighting. By adopting a plan of this type at the beginning, equipment can be installed as funds permit until





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Highlight and shadow play an important part in stage presentations. Here spotlights are used to give prominent emphasis to the old-fashioned light sources, which are themselves inadequate to produce required illumination.

the complete layout is available. This planning for the future is more satisfactory than a haphazard grouping of equipments, which in itself limits lighting possibilities.

A first consideration in starting a stage lighting project is to provide adequate illumination for the acting area and to do this economically. Borderlights or floodlights are the most efficient for this purpose and provide the most light for the least wattage. They should be several feet shorter than the opening of the arch. If, however, the apron extends out beyond the proscenium opening, some other means of providing lighting on the apron must be used; footlights are perhaps the simplest and most economical for this purpose. They have the disadvantage of projecting light from below, thus reversing shadows, but this is not so objectionable as inadequate lighting.

It is well at this point to decide on the number of color circuits to be used. If only one or two circuits are employed flexible control from a central point, the switchboard, is not provided. Also, if too many are used the control becomes unwieldy, like colors are spread too far apart and each circuit is too low in total watt-

age. If, however, the best use is made of each circuit with colors best suited for the purpose, three-color circuits are a happy compromise from all standpoints.

For lighting the acting area, three color circuits have been found to provide a usable combination for the borderlight: (1) surprise pink to provide an off-white color, to accentuate flesh tones and to minimize the need for makeup; (2) straw to provide a warm circuit to simulate sunlight and interior lighting by lamps, and (3) light (steel) blue for moonlight and colder sky effects. These colors, which are all light tints, absorb far less light than the more saturated colors and are more suited to the complexions and costumes of the players.

When footlights are used primarily for general lighting of the apron a somewhat similar color arrangement is dictated. If, however, some method of overhead lighting of the apron is provided, as from the balcony or beams, the footlights are used primarily for other purposes: to provide for the reversed light that is reflected from below and to tone the set. In this case, another coloring arrangement may be better, perhaps adher-

ing to the surprise pink and straw, but also providing a deeper blue for toning the set.

It is not necessary to have footlights extend up to the proscenium arch. It is desirable to leave about 2 feet between the footlights and the arch as a walkway and also to minimize the bright lighting of the arch.

If the apron is to be lighted from the balcony or beams, some concentrating type of equipment, one that does not spill light, is needed. Three circuits (two should be the minimum) are desirable, with the same color arrangement as used in the borderlights.

If a second borderlight is available it is generally used to provide light for the scenery. Here color plays an important part in creating a scenic illusion and it also can be used more freely than it can on the front of the stage where it may distort the appearance of the actors. For this reason, the primary colors of light, red, green and blue are most suitable. By mixing them with dimmers, any color, including a low value in white, may be obtained. For permanence, glass color screens are recommended.

Back drops or cycloramas, often lighted with cooler colors, need higher wattage equipments than borderlights. Gelatin color screens are preferable for this service in order

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than the exact color can be had. Floodlights of proper design serve this purpose and are preferably divided into two circuits so that two changes can be had or so that the total output can be used with one color if desired. These floodlights are usually hung on pipes 6 feet or more away from the drop.

These general lighting equipments are satisfactory for an average small stage. However, if the stage is deep, it may be necessary to add other borderlights fully to illuminate all parts of the stage.

Highlighting and modeling lighting are essential to a finished performance. They add those touches of brightness or color to accentuate a mood or to place emphasis and they also contribute greatly toward enhancing the appearance of players and making them more natural. Spotlights perform this important work. They may be mounted overhead or at the sides of the stage. When equipped with yoke hangers they are easily directed to any part of the stage. Being concentrating in type, they can be masked to the

particular shape or size desired.

When it is impossible to provide initially the complete equipment according to this plan, the following order of preference in obtaining equipment is suggested: (1) first borderlight or its equivalent; (2) half of overhead lighting, hanging spotlights; (3) portable floodlights; (4) footlights varying in importance depending upon the needs of the apron; (5) spotlights for "light beam," varying in importance depending upon the amount of apron extending beyond the arch opening; (6) remainder of overhead hanging spotlights; (7) tormenter spotlights; (8) second borderlight, and (9) spotlights on stand.

In planning a layout for the average stage, even when all equipment is not installed at the beginning, it is highly desirable that the outlets indicated be put in when the initial installation is made. This minimizes the need for extensive changes in wiring at a later date, facilitates the use of equipment at various points and makes it possible to control all equipment from the switchboard.

After the data have been assimilated, the survey staff plans the program. The entire staff agrees upon the recommendations for the location of the school centers, taking into consideration the location of the children, road conditions and sociologic and economic factors.

In working out recommendations for school centers, county and district lines are ignored in the interest of economy and efficiency. The state minimum program facilitates the ignoring of district and county boundary lines for school attendance in that funds accrue to the school systems mainly on the basis of average daily attendance regardless of the residence of the pupils. This eliminates duplication of schools near the boundary lines of adjoining counties and facilitates school administration.

There has been a significant trend during the period toward elimination of the inefficient and uneconomic small schools through consolidation into larger school centers. In 1934, there were 1042 one-room rural schools for white children in Alabama and by 1937 this number was reduced to 766. Two-teacher schools were cut from 690 to 533.

There is a decided trend toward the consolidation of the one-teacher Negro schools as shown by the fact that this type of school was reduced from 1704 in 1934 to 1509 in 1937. Negro rural schools with six or more teachers have increased from 52 to 81.

Consolidation and transportation of colored school pupils may be adopted as a fixed policy since a few counties already are following this practice. From 1935 to 1936 the number of pupils transported in twenty-one counties increased from 2599 to 3622 and the number of buses in operation, from 51 to 65.

Several counties own their school buses. The trend is decidedly toward county ownership and greater precautions for safety.

County commissioners in many counties have been diligent in improving roads over which pupils are transported. Several counties have gravel or hard surface roads over which pupils are transported. Surveys furnish the commissioners with objective data for improving transportation routes most economically and efficiently.

Alabama Pupils Go by Bus

TRANSPORTATION surveys of Alabama county schools are made by a field staff sent out by the state department of education. The staff goes to the county and divides up into groups of two or more members. These groups check each transportation route and visit each school for the purpose of collecting and checking local data and scoring the school plant according to its suitability for future use.

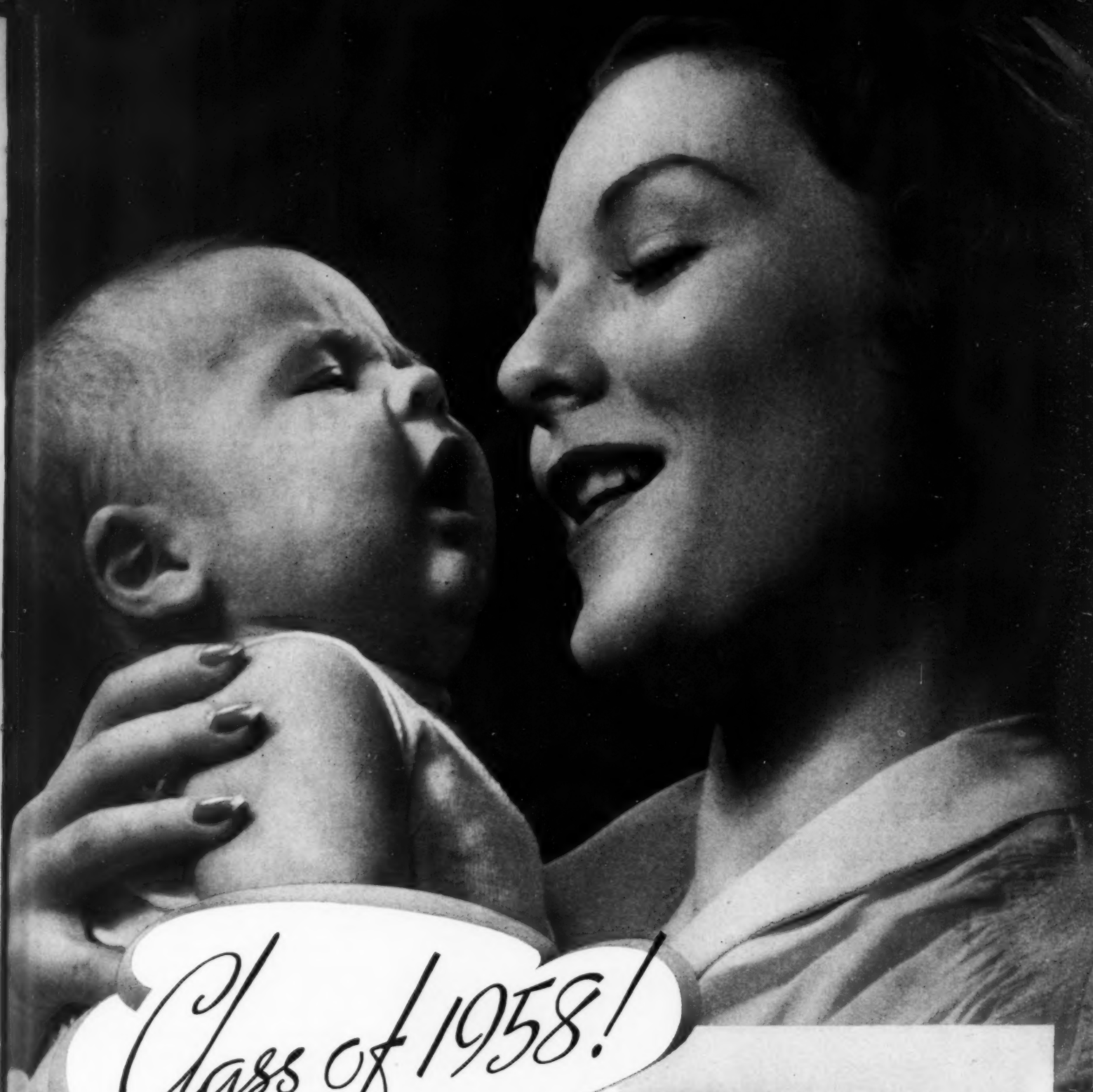
The bus routes are traced on a county map according to road classifications. From three to five days are required to complete the field work in a county, depending upon the number of schools, road conditions and the number of persons making up the survey field staff.

Conferences are held with the superintendent, the tax assessor and county commissioners relative to the financial conditions of the county, the school taxes and the future road construction and maintenance plan.

Data are gathered regarding sociologic conditions which may facilitate or retard consolidation.

The survey data collected in field work, together with information available in the state department of education from regular reports of the local school systems, are assembled to present a clear picture of each phase of the educational program of the county after the survey staff members have returned to the office of the state department of education.

Each elementary pupil is spotted on a large map in the $\frac{1}{4}$ of the $\frac{1}{4}$ section in the township and range in which he lives and the school that he attends is indicated. Junior and senior high school pupils are spotted on separate maps. Transportation routes are shown on a large map and the buildings and school sites also are placed on a map so as to show the suitability of the buildings for future use in terms of permanent or temporary retention or abandonment.

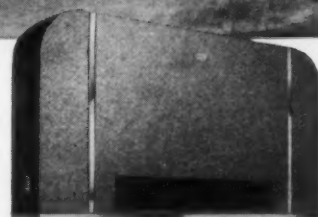


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Free Lunch in Baltimore

MARTHA SQUIRES BALTZ

FOR many years the city of Baltimore has been serving free lunches to its handicapped children in the elementary grades. This group includes the crippled, those with defective sight and hearing, cardiac patients and others who are malnourished and also undernourished.

In 1933 two new schools for handicapped children were completed, the William S. Baer School for the white handicapped and School No. 176 for the colored handicapped. These schools are among the finest of their

type in the country and are furnished with complete treatment rooms for a variety of cases, with offices for doctors and nurses. They provide excellent facilities for the preparation and service of nourishing food, which is considered important in the care of these children. In addition to the free lunches, breakfasts are served to one group needing additional food.

The William S. Baer School has an attractive dining room and one that is easily kept in perfect condition. The arched ceiling is sound-proof, with buff colored acoustically treated blocks. Glazed tile of a deeper shade covers the walls and the floors are laid with unglazed square tile of shades varying from cream to reddish brown. Strong library-type chairs, which do not tip easily, and 28 heavy oak tables, seating three on a side and one on each end, are used. These tables are waxed monthly to preserve the finish. Large ferns in the corners of the room are the only decoration. Seven broad high-arched windows along one wall overlook an oak grove, a part of the 7½-acre campus on which the school is located.

A serving counter with top of stainless steel fills the opening between the kitchen and the dining room. Whenever it is desirable to separate the kitchen from the dining room a sliding partition may be pulled down to close this opening. This counter is used for the teachers and junior high school children who have cafeteria service and buy their lunches. Two food trucks are wheeled through the dining room in the last three or four minutes before the free lunch group enters at 12 o'clock and four women serve the first course before the children are seated. As the food is hot when served, no hungry child becomes noisy and impatient while waiting for his lunch.

Desserts are not placed on the table with the first course. Many of these



Lunchtime in the William S. Baer School for Handicapped Children, Baltimore. Free lunches are served daily in the attractive dining hall to pupils suffering from malnutrition, cardiac conditions and other disabilities.



A serving counter with a top of stainless steel fills the opening between the kitchen and the dining hall. The same counter is used for the teachers and the junior high school pupils who buy their lunches in the cafeteria.

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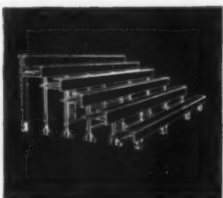
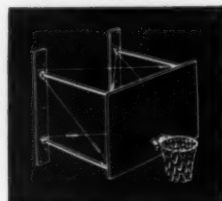
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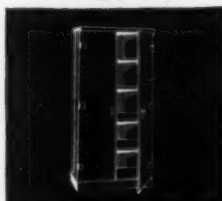
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CITY STATE



The free lunch comprises a half-pint or more of milk, vegetable or fruit (often both), with bread and butter or sandwiches and sometimes a simple dessert. Breakfasts are served to one group that requires additional food.

children have lived months in hospitals, many have been pampered at home and have never learned to eat some of the foods considered necessary for their best development. A clean plate is the ticket entitling one to dessert. When an unpopular food is served, a favorite dessert is sure to follow. Many children have learned to eat vegetables to earn the fruit gelatin or gingerbread glimpsed on the serving table.

The menus are planned by a group of dietitians of the public school cafeterias. They are arranged in three sets, fall, winter and spring menus. Each set contains menus for twenty days, which are repeated every four weeks for the season. As only one meal a day is served to the majority of the pupils an attempt is made to include each week the orange, tomato, green vegetable, egg, meat and cheese or fish, which might well be included daily if all three meals were served. In this way the school dietitians try to make up, at least partially, for the dietary deficiencies known to exist in the meals served in many homes, particularly those in the lower income brackets.

Each day a half pint or more of milk, vegetable or fruit (often both), bread and butter or sandwiches and sometimes a simple dessert are served. Butter is used for sandwiches and for seasoning vegetables. Fried foods and sweet rich desserts are not used. A sample week's menu for each set follows:

September to November

MONDAY—Breakfast: cereal and milk; lunch: Spanish rice, coleslaw, bread and butter, baked custard and milk.

TUESDAY—Breakfast: buttered toast and cocoa; lunch: vegetable soup, lettuce sandwich, orange and milk.

WEDNESDAY—Breakfast: oatmeal and milk; lunch: meat loaf, buttered cabbage, bread and butter, banana custard and milk.

THURSDAY—Breakfast: graham crackers and cocoa; lunch: green leafy vegetable, egg sandwich, cup cake and milk.

FRIDAY—Breakfast: saltines and tomato juice; lunch: macaroni and cheese, lettuce sandwich, fresh fruit cup and milk.

December to February

MONDAY—Breakfast: buttered toast and cocoa; lunch: stewed tomatoes, cheese sandwich, apple and milk.

TUESDAY—Breakfast: cracked wheat and milk; lunch: meat and vegetable stew, buttered bread, chocolate pudding and milk.

WEDNESDAY—Breakfast: buttered toast and tomato juice; lunch: bean soup, lettuce sandwich, orange and milk.

THURSDAY—Breakfast: graham crackers and cocoa; lunch: Italian spaghetti, raw vegetable sandwich, apple and milk.

FRIDAY—Breakfast: buttered toast and cocoa; lunch: creamed peas, buttered bread, baked custard and milk.

March to June

MONDAY—Breakfast: oatmeal and milk; lunch: creamed chipped beef on toast, lettuce sandwich, banana and cocoa.

TUESDAY—Breakfast: buttered toast, jelly and cocoa; lunch: fresh spinach, egg sandwich, fresh or stewed fruit and milk.

WEDNESDAY—Breakfast: saltines or graham crackers and tomato juice; lunch: bean soup (scrambled eggs on hot days), lettuce sandwich, fruit gelatin and milk.

THURSDAY—Breakfast: wheat cereal and milk; lunch: creamed carrots and peas, ham sandwich, orange and cocoa.

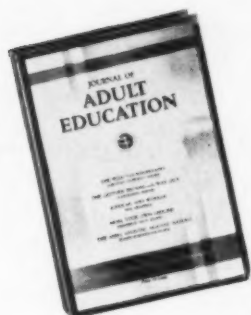
FRIDAY—Breakfast: buttered toast and cocoa; lunch: vegetable soup (vegetable salad on hot days), cheese sandwich, tapioca custard and milk.

At 12:30 p.m. junior high school pupils and their teachers have a lunch period. This group buys its lunches and the counter is set up for cafeteria service. In addition to the foods served on the free lunch menu, two or three 5 and 10-cent salads are provided, an 8-ounce portion of thick soup and two slices of buttered bread for 5 cents, a 10-cent hot plate with meat and two vegetables and a choice of several fruits and plain desserts. Soft drinks and candy are not sold.

The cafeteria personnel includes a full-time cook, an assistant, two part-time waitresses and a porter. The manager is responsible for her daily purchases of meats and produce, which are not included on the yearly food contract. She serves as cashier for the cafeteria line, supervises all food preparation and makes some salads and desserts. She keeps all records and must figure her expenditures so closely that at the end of the month she has used no more or less than the daily per capita allowance. As this allowance is small, menus and recipes must be figured to a fraction of a cent and all portions served must conform to the standard set for all public school cafeterias.

All handicapped children are checked regularly for weight gains and, as these are usually good, it is a great satisfaction to add to the physical development, formation of good eating habits and the daily enjoyment of these children in the William S. Baer School.

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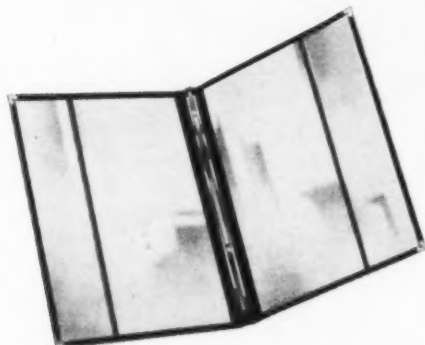


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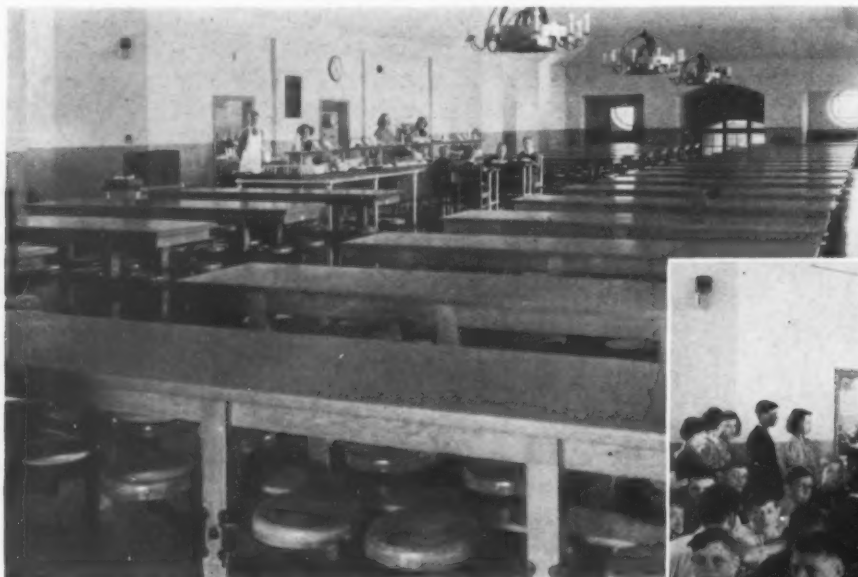
Mealtime at Milton

UNUSUALLY attractive because of its many unique features is the cafeteria in the Mary A. Cunningham Junior High School, Milton, Mass. Tables are equipped

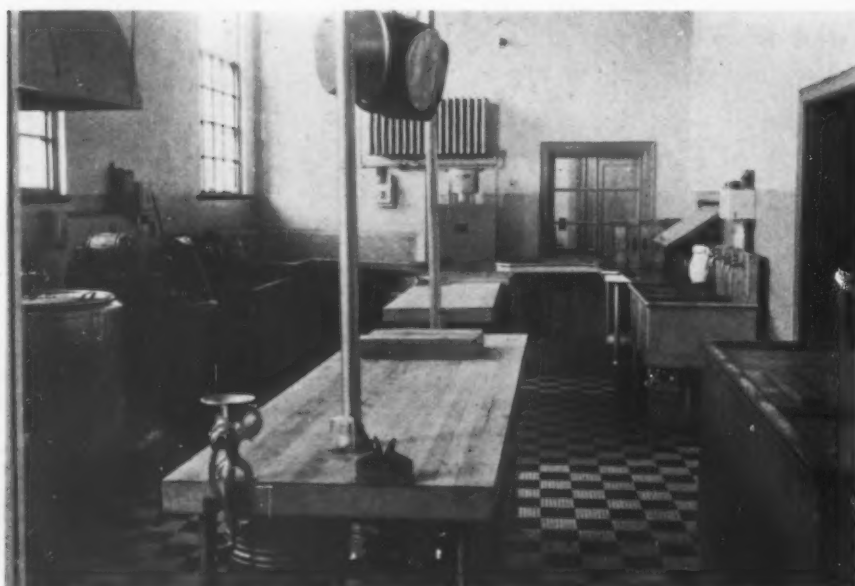
with swinging seats and beneath them is a shelf for books. The room has a seating capacity of 348. Each table is numbered according to the homerooms so that each child has an

assigned seat. Thus, any disorder can easily be checked. At the rear, to the right, three alcoves that will accommodate from six to eight persons each are provided for the teachers.

In the background is the counter set for service, with silver, trays, napkins, exhibit of trays set with 10 and 15 cent plate lunches, milk, sandwiches, desserts and hot dishes. Behind the counter the pupil help-checkers, cashiers and servers—is waiting for action while the student body is washing up preparatory to enjoying another square meal.



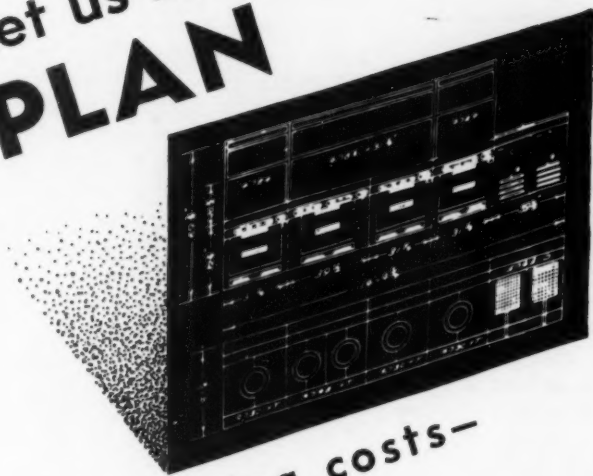
Above is the counter set for service. At the right is the line in action. Order of traffic is along the wall in turn, and by homerooms, then down the center aisle to the seats. Helen Hartmann, cafeteria director, finds this eliminates crowding. Each week the order of calling homerooms is changed so that each has its turn at being first.



The kitchen, above, is light and airy and is kept spotless. Right: Circular windows suggest portholes and give a nautical touch to the three alcoves at one end of the room, which are reserved for teachers.



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Vol. 21, No. 6, June, 1938

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BETTER PLANT PRACTICES

Painting Procedures

Because painting occupies much of the time and attention of the school maintenance man, it was decided to inquire into its actual practice. "When is the painting season? Who does the actual work? What methods are most popular? What types of paints are best for walls, interior trim and exteriors?"

Sound questions, every one of them! The next step was to pop them at various unsuspecting schoolmen and then draw our own conclusions. Precisely 1477 school systems were selected in 25 states. These were divided among towns of 2500 and under; 2500 to 10,000; 10,000 to 30,000; 30,000 to 100,000 and over. Three hundred and forty replied, 55 per cent representing towns of 2500 and under. The total average amount spent for paint in 1937 was \$648.87. Based on these reports, the following observations can safely be regarded as trends.

Time to Paint

No time is to be lost if arrangements are not already made for the 1938 painting season. It is now in progress, or will be immediately after school closes. Summer is the time when the buying takes place, the brushes begin to swish back and forth or the spray guns to perform modern miracles, but more of that later when we get to methods.

Seventy-five per cent of the schools reporting indicate that they buy all or part of their paint in the summer as against 32 per cent that purchase all or part in the spring. It is apparent that comparatively little is bought in the fall or winter. Incidentally, there promises to be about the same amount used on interior walls this summer as last and somewhat less on interior trim and exteriors, with the exception of those systems in cities of 100,000 and over. Apparently they are going in for brighter interiors in a big way, at least in a bigger way than last year.

Who Does the Work?

Here is another interesting fact. It is the school's own staff that does the wall surfaces in the majority of communities, irrespective of size. To be exact, 62 per cent indicated that they used either their own staff or a combination of their own staff and con-

tractor. This was against 38 per cent doing all their work through contractors.

Much the same condition exists in painting the interior trim. Actually, slightly more use their own staff for this work than for wall painting. Exteriors, on the other hand, are frequently done on contract. This may be attributed to the necessity for scaffolding equipment, the element of possible injury to the painter and the need for a carefully prepared painting surface.

As to Methods

It is the man with a brush we see most frequently, and not the masked manipulator of modern mechanism who sprays and sprays. At least that's what we are told and there is no arguing with figures.

Some 86 per cent use the brush method while 8 per cent use spray exclusively and 6 per cent both spray and brush. In those school systems in which the spray method is used, it is confined almost entirely to painting the walls.

Popular for Walls

Were a popularity contest to be conducted among wall paints, ready-mixed paint would get the votes. About half of those using this type prefer the flat finish, which, however, is given only a slight preference over semigloss. Comparatively few use a glossy ready-mixed.

Calcimine is still used in many schools, winning more votes from the smaller towns than from the larger centers. On the other hand, casein paint, which is a recently developed water-thinned type of paint, has been widely accepted in the larger cities. Lead and oil are used by approximately 18 per cent of the schools.

In seeking the right wall paint, it becomes evident that a widespread appreciation exists of the relation between the color and texture of a paint and proper illumination of the classroom. Light reflection was specified by 71 per cent as being one of the important qualities of a wall paint. This indicates a trend toward lighter shades in wall paint and accounts for the small amount of gloss used on wall surfaces.

Durability ranks high among the essentials. Surprising, however, is the

fact that cost per gallon is of minor importance, being mentioned by only 17 per cent as among the three most important qualifications. Apparently schoolmen have learned that savings in the original cost of the paint do not necessarily mean a saving in the ultimate cost of properly maintaining painted classroom surfaces.

Quick-drying is of little consequence, it seems. This may be attributed to the fact that time means little during summer vacation when the painting is done.

Treating the Trim

Varnish wins first place for interior trim. This preference over ready-mixed paint becomes more marked as the size of the town increases. In towns of 2500 and under, for example, 60 per cent use some varnish and 44 per cent use some ready-mixed for the same purpose. In towns of 100,000 and over, 78 per cent use varnish as compared with only 21 per cent using ready-mixed.

Also significant is the fact that while flat ready-mixed paint is used slightly more than semigloss on walls, semigloss is greatly preferred over flat paint for interior trim. In towns 10,000 to 100,000, approximately one-sixth use some enamel for interior trim. Slightly more than one-third in towns of 100,000 and over use enamel.

As is true with wall paint, durability and washability rank high in importance in selecting paint for interior trim. These qualifications are not quite as important, however, as the cost of the square foot coverage. Here there is considerable distinction between the cost per square foot covering and the cost per gallon. The former was listed as an important factor by 33 per cent while only 18 per cent mentioned the latter. Light reflection is of considerably less importance on trim than on wall surfaces, but the reputation of the paint manufacturer is of greater importance.

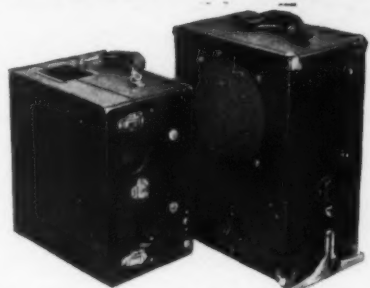
Exterior Treatment

Lead and oil is the favorite treatment for exterior surfaces. This is particularly true as the size of the school system increases, owing no doubt to the extensive employment of professional painters. Where ready-mixed paint is used, there is little apparent preference between the flat and semigloss and glossy finishes.

Durability is the most important single factor in selecting an exterior paint. More importance is also attributed to the manufacturer in selecting paint for this purpose, as it is ranked second in importance, whereas for interior trim it is ranked third and in walls, fifth.

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NEWS IN REVIEW

Cost v. Accomplishment

The modern streamlined school, with its new gadgets, does a better job teaching the traditional curriculum than the model-T schools, still found in the poor communities of Illinois, according to the Illinois Education Association.

The association's study is the first in Illinois to use standard tests to determine the relationship between cost and accomplishment in elementary schools.

Children in the poorer schools were found to lag as much as four and five years behind pupils in high cost schools in reading, arithmetic, language and geography. This is contrary to the predictions of the expert advisers of the study, who pointed out that since the poorer schools taught only a few subjects they should be doing better work in those subjects than the high cost schools with their wide curriculums.

Twenty-Four Schools Studied

From the elementary schools enrolling 250 to 500 pupils, eight schools spending the most per pupil, eight schools of average expenditure and eight of lowest expenditure were selected for study. A median expenditure per pupil for the high cost group was \$95.38; for the average, \$52.94, and for the low group, \$32.18.

The seventh grade that tested lowest in reading, arithmetic, language and intelligence was found in the town of lowest cost per pupil, shortest term and poorest equipment. The town having the largest class size and the fewest library books tested lowest in eighth grade reading ability. A comparison of the entire high cost group with the entire low cost group shows that the low cost group lags as much as two years in the traditional subjects.

The type of school studied, enrolling from 250 to 500 pupils, will not be abandoned in the process of larger district reorganization, it was said. Median assessed valuation per pupil was found to be \$2500 in the low cost group and \$8000 in the high cost group. Tax rates are slightly higher in the low cost school districts.

The study showed further that financially handicapped schools have fewer especially equipped rooms and do less in departmentalizing school work; give less individual attention to pupils on account of larger classes; have a shorter term; have teachers not as well trained as those in the high level cities; have a much lower salary schedule, tending less to grant increments for experience and additional training;

have less administration service than do the high cost schools, and offer fewer opportunities for administrators to attend educational meetings at district expense.

FINANCE

Retirement Program

A minimum monthly income will be provided for retired teachers of the schools at Grand Island, Neb., through a plan that provides for a joint contribution of the teacher and the board of education to the retirement fund.

A retirement program, which will function through the medium of old line, legal reserve life insurance or annuities, established by the board of education, includes the following provisions:

1. The age of 40 is fixed as the basic age upon which the program is set up. Each teacher who has reached 40 years of age upon signing a contract with the Grand Island Board of Education will be required to provide a retirement income life insurance in an amount sufficient to guarantee a minimum income of \$25 a month for life beginning at age 65.

2. Teachers who have reached the age 48 at the time of the adoption of the retirement program shall contribute at least \$100 annually to an annuity or to a retirement income life insurance premium. Together with the annual contribution of the board of education, this sum will be used to purchase whatever income is possible at age 65.

3. The annual contribution of the board of education to the retirement income at the basic age of 40 years will be \$50. This will be in addition to that portion of the teacher's annual salary authorized by the salary schedule set up by the board.

Adopt Salary Plan

A teachers' salary adjustment plan has been adopted by the board of education at Fair Lawn, N. J., upon recommendation of Supervising Principal F. H. Brunswick. The plan provides a minimum salary of \$1100 for teachers with two years' experience. An extra \$100 is added for the first year of service and an increase of \$25 for each year thereafter. To this is added \$50 per year for a teacher with one-half of a college year, if the work is correlated with that carried on in the Fair

Lawn schools. Each additional year of college extension work adds \$100 annually.

RESEARCH

Research in Reading

A study of students' reading habits and the correlation between reading and scholarship record will be one of the research projects in library problems that will be undertaken by the graduate library school of the University of Chicago with funds contributed by the Carnegie Corporation of New York.

Six research projects in library problems will be carried out with the \$50,000 grant, according to Dr. Louis R. Wilson, dean of the school.

If the results of the reading study show a significant relationship between school performance and reading, Dean Wilson believes that reading records will become part of the information educators use to counsel and direct students.

Earlier studies on analysis of reading difficulties and the simplification of books for adult readers with limited education, made by Prof. William S. Gray of the department of education and Douglas Waples, professor of educational methods in the graduate library school, will be extended in this study, according to present plans.

The earlier work identified many of the factors that made for ease or difficulty in reading and verified findings by checking with readers' advisers in libraries. It is planned to extend the list of factors and to experiment with books written particularly for readers whose education is that of the level of the seventh grade or lower.

Testing Reading Weaknesses

To test the effectiveness of corrective reading work with college students, Nila B. Smith of the Indiana University School of Education is diagnosing the reading weaknesses of seventeen N.Y.A. workers who are taking part in the experiment. These tests include paragraph meaning, word meaning, selection of central idea of a paragraph, sentence meaning, location of information and rate of silent reading.

TRANSPORTATION

Transportation Advance

A total of \$622,400 has been expended during the last two years for new school buses by school boards in Minnesota, according to statistics recently prepared by T. C. Engum, di-

rector of rural education in the Minnesota Department of Education.

In 1936-37 an amount of \$276,500 and in 1937-38 a sum of \$345,900 was expended. This is an increase of 25 per cent over the 1936 figures. The advancement made during this two-year period in providing substantially constructed motor buses is said to be the greatest since motor transportation was inaugurated in Minnesota schools more than twenty years ago.

School boards invested \$192,900 in new motor chassis and bus bodies,

while the bus drivers purchased transportation equipment to the extent of \$153,000.

The tendency in school bus ownership at the present time seems to be for the districts to own and operate the entire equipment, Mr. Engum states. More than twice as many districts this year purchased complete units as for 1936-37. District ownership has been found to be more economical and satisfactory, as districts are not in the business of transportation for profit but for service, the report shows. It is more



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N. Y. Restricts Standees

Under the revised rules for school buses adopted by the New York State public service commission standees will not be permitted in excess of 30 per cent of seating capacity, beginning September 1. The revised rules will affect 8000 school buses transporting about 135,000 pupils during the school year.

Other rules specify that step-wells must be kept free of standing passengers while the bus is in motion; that not more than two passengers, in addition to the driver, will be permitted to occupy the front seat, and seven-passenger sedans will not be permitted to carry more than ten passengers in addition to the driver, or five-passenger sedans more than six passengers in addition to the driver.

INSTRUCTION

Cafeteria Short Course

Continuing the work begun last year on organization, administration and special problems of the school cafeteria managers, the second school cafeteria managers' short course will be held on the campus of Oklahoma A. & M. College at Stillwater the week of June 6 to 10. The course will be given under the direction of the Oklahoma State Department of Vocational Education in cooperation with the Oklahoma A. & M. school of home economics.

Faith McAuley, formerly head of the institutional economics department at the University of Chicago, will be guest instructor. Dr. Daisy I. Purdy of Oklahoma A. & M. College also will be on the staff.

Through the services of an increased staff, a variety of classes will be offered to meet the needs of commercial cookery teachers, home economics teachers and others interested in the feeding of school children, as well as school cafeteria managers.

There is no fee for admission to the short course.

Guidance Institute

To evaluate principles underlying the practice of guidance, a two-day institute will be conducted at the University of New Hampshire, July 13 and 14, as a part of its summer session. Among the educational leaders who will conduct general conferences will be Dr. John W. Studebaker, U. S. commissioner of education, and Dr. Ernest

Butterfield, retiring state commissioner of education for Connecticut.

Three Schools for Janitors

Three janitor-engineer schools will be conducted in Kansas during June by the Kansas State Board of Vocational Education, the Wichita and Topeka public schools and the Fort Hays State College. Sessions will be held in Wichita, June 6 to 10; in Topeka, June 13 to 17, and in Hays, June 20 to 24. Laurence Parker of Pittsburg, Kan., will direct the schools.

MEETINGS

Administrators to Cleveland

Cleveland has been selected as the meeting place for the sixty-ninth annual convention of the American Association of School Administrators, Feb. 25 to March 2, 1939. Seventy-two other groups will hold conferences preceding or during the principal convention. Members of the association selected the city by preferential ballot. The convention of the A.A.S.A. last took place in Cleveland in 1934.

N.E.A. in New York

The responsibility of education in promoting world citizenship has been chosen by the N.E.A. as the theme for its general sessions in New York, June 26 to June 30. Convention headquarters will be at the Pennsylvania Hotel.

The Monday morning session on June 27 will open with addresses of welcome from Governor Herbert Lehman of New York; Mayor Fiorello H. LaGuardia of New York City; Frank P. Groves, state commissioner of education; Grover A. Whalen, director of the New York World's Fair, and Harold Campbell, New York City superintendent of schools. The response will be given by Emily A. Tarbell, president of the N.E.A. department of classroom teachers. Following these preliminaries will be the presidential address by Caroline S. Woodruff.

For Cafeteria Directors

School cafeteria problems will be given prominence in the program of the department of institution administration of the American Home Economics Association meeting in Pittsburgh, June 28 to July 1, for a number of papers are scheduled on that subject.

Winning Pendergast, assistant director, department of school lunchrooms, Detroit board of education, will discuss "Prerequisite Training and Internship for the School Cafeteria Director";

Frank C. Moore, director of industrial arts, Cleveland Board of Education, will discuss "The School Cafeteria—Why?"; Helen Petry, director of lunchrooms, Hanover Township Schools in Ohio, "Food for Health in the School Cafeteria," and Mrs. Bessie Brooks West, head of institutional economics, Kansas State College, "Present Administrative Policies Regarding School Cafeterias."

Presiding over two of the sessions will be Mary C. Kelly, cafeteria director of public schools at Hartford, Conn., and Mary Hemmersbaugh, supervisor, division of school lunchrooms, Cleveland Board of Education.

PERSONNEL

Discounts for Leave Travel

Teachers or professors in the United States and Canada on sabbatical leave who wish to travel abroad may obtain a 20 per cent discount from round-trip port rates for steamship lines belonging to the Trans-Atlantic Passenger Conference. The offer is being made for a two-year experimental period and applies to eastbound travel between August 15 and March 30, inclusive, and

westbound travel between October 15 and July 15, inclusive. A certificate signed by a responsible officer of the schools or college must be presented to the steamship company.

Detroit's Tribute

When a huge, loaded coal truck bore down on five small school children approaching the Lynch School in Detroit, "Dick," the janitor-traffic director, stationed at a crossing near the school, shoved the children on to the sidewalk, only to be hit by the truck himself. At the expense of the janitor's two fractured legs, five children's lives were saved.

Richard Durieu, the janitor, had been enlisted in the Belgian army during the World War. During the period of his convalescence from the fractures, the American Legion transmitted the story of his valor to Legion headquarters, where he was voted the Legion Medal of Valor for unusual heroism. Presentation of the award to the hero was made at a special assembly at the Lynch School.

Memorial for Custodian

A memorial service for the late E. L. Reynolds, school custodian, was held recently in the Bancroft School, Lin-

coln, Neb., in which both teachers and pupils expressed their appreciation.

Commented the *Nebraska Educational Journal*: "The memorial emphasized so vividly the contribution of the custodian to the character-building work of the school, his influence on children through his faithfulness, his efficiency, his recognition of human values, his patience, his kindness, his clean living and the beauties in the life and work of an ordinary laborer."

PUBLICATIONS

California History Nugget

Supplementing textbooks on history, the California State Department of Education in conjunction with the California State Historical Association is issuing a new publication, "California History Nugget." This departure in the teaching of history in elementary and junior high schools is edited by Dr. Owen C. Coy, chairman of the history department, University of Southern California and director of the California State Historical Association.

The magazine will have six issues during the school year. Approximately 20,000 copies of the first number have



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been distributed. The present issue contains highlight articles on Drake's visit to California, Indian names and their adoption, a treatise on the beet industry, a legendary account of Lake Tahoe regions and a historical sketch of Point Fermin.

Serving with Doctor Coy on the editorial staff are members of the state department of education staff: Helen Heffernan, chief of the elementary and rural schools division; Ivan R. Waterman, chief of the division on textbooks and publications, and H. M. Spadden, contributing editor.

BUILDINGS

Investigation at Farmerville

Early one Monday morning in April the high school building at Farmerville, La., was severely damaged by an explosion. Had the explosion occurred four or five hours later, when approximately 300 pupils would have been in the building, a heavy life loss might have resulted.

When the Louisiana State Department of Education set about to discover the cause of this explosion, Dr. David

J. Price, explosion expert of the bureau of chemistry and soils, U. S. Department of Agriculture, was asked to investigate.

Last month Doctor Price reported that the explosion was caused by excess pressure in the gas-heated range boiler, which was used to supply hot water to the home economics department. This pressure was caused by the generation of steam by a gas flame that had not been completely turned off at the close of class work on the preceding Friday. Pressure slowly increased in the boiler and water pipes because the water supply valve had been turned off. This closed valve prevented the excess pressure from forcing the water back through the supply pipe into the main line.

Following this discovery, Doctor Price recommended some precautionary measures for preventing explosions of this character:

1. All manually operated or automatic hot water heating boilers should be equipped with safety valves to relieve excessive pressures. These valves should be tested at regular intervals to ensure their proper operation.

2. All hot water heating equipment should be under supervision of responsi-

Coming Meetings

- June 6-10—Kansas Janitor-Engineer School, Wichita.
- June 6-10—Short Course for School Cafeteria Managers, Oklahoma A. & M. College, Stillwater.
- June 9-11—School Administrators Conference, George Peabody College for Teachers, Nashville, Tenn.
- June 13-17—Kansas Janitor-Engineer School, Topeka.
- June 13-17—Summer School for Engineers and Custodians, University of Minnesota, Minneapolis.
- June 20-24—Kansas Janitor-Engineer School, Pittsburg.
- June 20-23—National Conference on Visual Education, Francis W. Parker School, Chicago.
- June 20-25—National Association of Engineers and Custodians, St. Louis.
- June 21-24—Sixth Annual Custodian Training School, Iowa State College, Ames.
- June 26-30—National Education Association, New York City.
- June 27-July 7—American Association for Teachers of the Deaf, Wayne University, Detroit.
- June 28-July 1—American Home Economics Association, Pittsburgh.
- June 30-July 1—Conference on Business Education, University of Chicago.
- July 1-15—Conference of the N.E.A. Department of Elementary School Principals, New York.
- Oct. 10-14—National Association of Public School Business Officials.
- Oct. 13-15—Vermont Education Association, Burlington.
- Oct. 19-22—National Council on Schoolhouse Construction, New Capital Hotel, Frankfort, Ky.
- Oct. 19-21—New Hampshire State Teachers' Association, Concord.
- Oct. 20-22—Wyoming Education Association, Rawlins.
- Oct. 26-28—West Virginia State Education Association, Charleston.
- Oct. 26-28—North Dakota Education Association, Fargo.
- Oct. 27-28—Indiana State Teachers' Association, Indianapolis.
- Oct. 27-28—Maine Teachers' Association, Bangor.
- Oct. 27-29—Minnesota Education Association, Minneapolis.
- Oct. 27-29—Rhode Island Institute of Instruction, Providence.
- Oct. 27-29—Montana Education Association, district conventions, Kalispell, Billings, Great Falls and Bozeman.
- Oct. 27-29—Colorado Education Association, district conventions, Denver, Pueblo and Grand Junction.
- Oct. 28—Connecticut State Teachers' Association, New Haven, Hartford and Bridgeport.
- Oct. 28-29—Maryland State Teachers' Association.
- Nov. 3-5—Iowa State Teachers' Association, Des Moines.
- Nov. 3-4—Arkansas Education Association, Hot Springs or Little Rock.
- Nov. 4-5—Kansas State Teachers' Association, Kansas City, Topeka, Salina, Hays, Garden City, Hutchinson, Wichita and Pittsburg.
- Nov. 6-12—American Education Week.
- Nov. 10-11—Delaware State Education Association, Newark.
- Nov. 10-12—New Jersey State Teachers' Association, Atlantic City.
- Nov. 16-19—Missouri State Teachers' Association, Kansas City.
- Nov. 20-23—South Dakota Education Association, Mitchell.
- Nov. 22-25—Virginia Education Association, Richmond.
- Nov. 24-26—Texas State Teachers' Association, Dallas.
- Nov. 25-26—Idaho Education Association, Boise.
- Nov. 25-26—National Council for the Social Studies, Pittsburgh.
- Nov. 30-Dec. 3—American Vocational Association, St. Louis.

ble school officials, who should carefully check all valves, tanks and heating equipment at the close of each day.

3. The practice of turning off water supplies to hot water boilers to economize on water bills should be discontinued. The plumbing fixtures and connections in the building and to outside drinking fountains should be kept in good condition so that water in the supply line need not be shut off.

4. Provision should be made for regular and systematic safety and fire prevention inspections in school buildings. This self-inspection can be made at least each month by a committee of three, consisting of the principal, local fire chief and janitor. The completed inspection reports should be filed with the local board of education. Self-inspection blanks can be secured from the various field offices of the National Board of Fire Underwriters.

5. Rural school districts should provide inherent insurance explosion protection on school properties. The protection should not only cover fire loss but explosion damage as well.

Wheaton Competition

An important school architectural competition is the contest to select an architect for a proposed art center for Wheaton College at Norton, Mass.

The contest closed May 24 and the names of the judges will be announced June 2, the first day of judging.

Entrants include many prominent architects in addition to the four invited firms, Gropius and Breuer, Cambridge, Mass.; William Lescaze, New York; Lyndon and Smith, Detroit, and Richard J. Neutra, Los Angeles, who were selected for their achievements in building schools of modern design.

The purpose of the art center is to provide a building to serve the common needs of the departments of art, dance, drama and music. A theater seating 500 persons, a rehearsal room and all the dramatic department workshops are required. There will be soundproof rooms for the department of music. The proposed building must harmonize with the red brick Colonial-Georgian of the older Wheaton buildings.

Rome (H.S.) Burns

Fire that swept the senior high school at Rome, N. Y., recently resulted in a \$400,000 loss and left 1099 pupils temporarily without school facilities. The city faces a \$150,000 estimated loss on the building and \$25,000 on equipment. Pupils' books were destroyed and teachers' records in many classrooms were burned or watersoaked. The building, constructed in 1926, has been

criticized on several occasions because of its construction. A few years ago the entire structure was repointed as a W.P.A. project when a board member reported that mortar could be scraped from between the bricks by finger nail.

Night Fire

Fire recently destroyed the three-story high school building at Fairfield, Iowa, which housed 550 pupils. Supt. W. G. Pence said the loss would total about \$250,000, 90 per cent of which was covered by insurance. The fire was discovered at 1:30 a.m. Three hours before the school had been closed and the electric switches pulled, following presentation of a home talent play.

VISUAL EDUCATION

Slide Technic in Reading

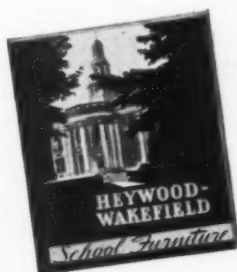
The audio-visual education and primary departments of the public schools at Evansville, Ind., have conducted an experiment in beginning reading to determine the relative abilities of children in a "control group" and in an "experimental group."

Four teachers in each group participated in the experiment. The control group taught reading with regular

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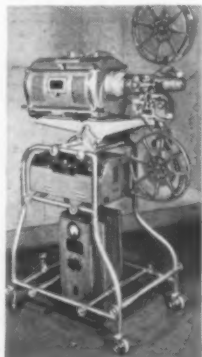
Altogether, this splendid series includes 27 feature pictures, 50 short subjects, and three serials. Send coupon now for complete list of these carefully selected films.

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Whether you need a sound film projector for use in a large auditorium or in small classrooms, there is a Filmosound exactly suited to your needs. All are built to that Bell & Howell standard of excellence which insures brilliant, steady pictures and faithful, full-range sound reproduction. Bell & Howell Company, Chicago, New York, Hollywood, London. *Established 1907.*

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For classroom or small auditorium use, the new Filmosound 138 offers theater-perfect 16 mm. projection. It has every feature needed for school movie exhibition: projects both sound and silent films, permits reverse or still projection, has speaker-hisseliminator, 750-watt lamp, and 1600-foot film capacity.



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text material while a technic involving the use of slides was used by the other group. The Metropolitan Reading Readiness test was given at the start of the semester. The median age and median reading readiness for both groups were found to be nearly equal. After one semester of reading by the two technics, each group was given the Metropolitan Reading Achievement test.

The experimental group made an average of one month superior achievement over the control group. Most significant was the finding that children in the low quartile made an average of two and one-half months' better performance when slides were used.

Military School Uses Films

Kemper Military School at Boonville, Mo., has shown 150 reels of educational film, consisting of approximately 60,000 feet of film, in classroom work during the year. Recently a new motion picture sound projector was purchased by the school. The school also owns fourteen small silent movie projectors which are used for publicity purposes. Along with the new sound equipment

the school is purchasing many records that will be used in teaching foreign languages.

Prepares Catalog

A catalog listing 1000 free 16 mm. films with addresses of distributors has been prepared by L. D. Miller of the Scienceville High School, Youngstown, Ohio. Films are listed alphabetically according to subject matter.

Northwestern's Center

Marking the establishment of an experimental center for the development of visual education at the university college of Northwestern University, a conference on the adult and visual education was held May 13 and 14 on the Chicago campus.

Four Midwestern schoolmen who are using visual aids to promote schools within the community appeared on the program: Supt. H. C. Bauer of Lakefield, Minn.; H. M. Genskow, director, Shorewood Opportunity School, Milwaukee; W. W. Whittinghill of the Detroit public schools, and C. R. Crakes, high school principal at Moline, Ill.

Films for the School Screen

Physics

Sound Waves and Their Sources—

Demonstrates types of sound sources and depicts the transmission of sound waves. Characteristics of sound waves are explained visually with acoustic accompaniment. 1 reel. 16 and 35 mm., sound. For rent or for purchase. Erpi Picture Consultants, Inc., 250 West Fifty-Seventh Street, New York.

Communication—Study of sound waves and their application to the electric bell, telephone and wireless. 1 reel. 16 and 35 mm., silent. For purchase. DeVry Corporation, 1111 Center Street, Chicago.

Electrostatics—Dealing with that part of electricity that deals with phenomenon of static electricity. By Dr. Harvey B. Lemon of the University of Chicago. 15 minutes. 16 and 35 mm., silent. Society for Visual Education, Inc., 327 South La Salle Street, Chicago.

Behavior of Light—The ideas of transmission, shadows and eclipses; the action of various types of lenses and the reasons for lens action; the formation of images, both real and virtual, in plane, convex and concave mirrors; the cause of refraction. 1 reel. 16 mm., silent. For purchase. Eastman Kodak Company, Teaching

Films Division, Rochester, N. Y.

Water Power—Produced in collaboration with Dr. George T. Renner, Jr., of Teachers College, Columbia University. It begins with the portrayal of the cycle through which the use of water power has passed. Includes an illuminating series of animated drawings showing the operation of a turbine in a hydroelectric plant. Sound. For rent or for purchase. Erpi Picture Consultants, Inc., 250 West Fifty-Seventh Street, New York.

Gas Engine, Four-Stroke Cycle—Demonstrates the four-stroke cycle in a single-cylinder "T-head" type of motor, the fuel system of an engine, water and air cooling. 1 reel. 16 and 35 mm., sound. For sale. Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

Power Transformers—Review of thirty-five years of engineering and manufacturing progress in the building of transformers; comparison of the earliest transformer, weighing 20 pounds, with a modern transformer weighing 100 tons indicates the progress which has been made in this field. 2 reels. 16 and 35 mm., silent. Free. General Electric Company, Visual Instruction Section, 1 River Road, Schenectady, N. Y.

On the Air During June

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Daylight Saving Time.

Daily

12:30-1:30 p.m.—National Farm and Home Hour (NBC Blue).¹

Monday

5:00-5:15 p.m.—Madeline Gray, Children's Corner (CBS).
5:15-5:30 p.m.—"New Horizons," sponsored by the American Museum of Natural History (CBS).
7:00-7:15 p.m.—Music Is My Hobby (NBC Blue).
10:30-11:00 p.m.—National Radio Forum (NBC Blue).

Tuesday

2:30-3:00 p.m.—NBC Music Guild (NBC Blue).
4:00-4:45 p.m.—Current Questions Before the House (CBS).
6:00-6:15 p.m.—Science in the News (NBC Red).
5:00-5:30 p.m.—Let's Pretend, a program of fairy stories for children (CBS).

Wednesday

2:00-2:30 p.m.—Your Health, supplementary material for health teaching in junior and senior high schools, sponsored by the American Medical Association (NBC Red).
June 1—Vacation Plays and Misplays.
June 8—Graduation.
June 15—What Medicine Offers for Health, flashes from the A. M. A. meeting in San Francisco giving highlights of medical progress.
5:15-5:30 p.m.—Exploring Space, sponsored by the American Museum of Natural History (CBS).
5:00-5:15 p.m.—Madeline Gray, Children's Corner (CBS).

6:00-6:15 p.m.—Our American Schools, sponsored by the N. E. A. to promote teacher welfare and better support for schools (NBC Red).

7:30-7:45 p.m.—Living History, CBS adult education series.

7:45-8:00 p.m.—Science on the March (NBC Blue).

Thursday

2:00-2:30 p.m.—NBC Music Guild (NBC Red).

4:00-4:15 p.m.—Adventures in Science (CBS).

4:30-5:00 p.m.—Education for Living, sponsored by the General Federation of Women's Clubs (NBC Blue).

5:00-5:30 p.m.—Let's Pretend, a program of fairy stories for children (CBS).

7:45-8:00 p.m.—Science on the March, under auspices of the American Society for the Advancement of Science (NBC Blue).

9:30-10:30 p.m.—America's Town Meeting of the Air (NBC Blue).

10:30-11:00 p.m.—Americans at Work, interviews with workers in representative jobs. CBS adult education series.

Friday

3:00-4:00 p.m.—NBC Radio Guild (NBC Blue).

3:30-3:45 p.m.—Current Questions Before the Senate (CBS).

5:00-5:15 p.m.—Madeline Gray, Children's Corner (CBS).

6:00-6:15 p.m.—Education in the News, dramatization of news items in education by the U. S. Office of Education (NBC Red).

7:15-7:30 p.m.—The Story Behind the Headlines, presented under joint auspices of

American Historical Association and NBC. Cesar Saerchinger, radio commentator. (NBC Blue).

7:30-7:45 p.m.—Adventures in Science, Dr. Lawrence Kelso Frank, sociologist, commentator. CBS adult education series.

Saturday

10:30-10:45 a.m.—The Child Grows Up (NBC Blue).

11:00-11:15 a.m.—Our American Schools, sponsored by the N. E. A. to bring home and school in closer cooperation (NBC Red).

11:30 a.m.-12:00 m.—Music and American Youth (NBC Red).

5:00-5:30 p.m.—Stories of Industry, sponsored by the U. S. Department of Commerce (CBS).

5:00-6:00 p.m.—Great Plays (NBC Red).

9:30-10:00 p.m.—American Portraits (NBC Red).

Sunday

4:30-5:00 p.m.—The World Is Yours, thrilling adventures in the world of science by the Smithsonian Institution (NBC Red).

10:30-11:00 p.m.—University of Chicago Round Table (NBC Red).

¹Except Sunday.

RADIO

Cleveland Is First

Cleveland's board of education has made the first application for short-wave educational radio facilities under the recent grant of 25 channels in the ultra-high frequency band for non-profit educational broadcasting by the Federal Communications Commission.

New York, Detroit, San Francisco and San Antonio city school systems, as

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well as Boston University, the University of Michigan and Whittier College in California, are said to be studying the problems involved in constructing and operating ultra-high frequency stations.

Offer Radio Summer Courses

At least 60 institutions are offering courses in radio education, radio speech or radio writing during the 1938 summer session, according to information obtained by the National Committee on Education by Radio. A postcard survey was made of the 782 universities, colleges, teachers' colleges and junior colleges listed as having summer sessions. Replies were received from 336 institutions, 60 indicating one or more radio courses.

Michigan's Programs

The University of Michigan's radio audiences heard 227 programs during the year ending April 1. These programs, mostly educational in nature, are a part of the teaching program of the broadcasting bureau of the university, which enrolled 275 students in twelve broadcasting classes during the year.

Columbia's Adult Programs

The launching of three separate series of programs in late April by the Columbia Broadcasting System marked the initial step of its adult education board, headed by Lyman Bryson of Teachers College, Columbia University, to formulate a new plan of adult education through radio.

Definite time schedules for the programs have been announced. "Living History" will be presented weekly on Wednesday from 7:30 to 7:45 p.m. (E.D.S.T.); "Adventures in Science" will be heard each Friday at that same time, and "Americans at Work" is heard on Thursdays from 10:30 to 11 p.m. (E.D.S.T.)

NAMES IN NEWS

City Superintendents

E. E. OBERHOLTZER, superintendent of schools, Houston, Tex., will be a visiting professor in the department of education at the University of Chicago during the summer session.

JOHN L. SCHENK, superintendent of schools, Ridgefield, Wash., has been elected superintendent at Corvallis, Ore., succeeding H. W. ADAMS.

E. S. COLVIN has been elected for the third term as superintendent of schools at Osage City, Kan.

HERBERT S. JONES, director of social

studies in the school system at Gary, Ind., for fourteen years and a member of the schools' faculty since 1923, has been appointed acting superintendent of schools to serve as successor to the late WILLIAM A. WIRT, pending selection of a permanent school chief at Gary.

LEVI GILBERT, principal of the senior high school, Altoona, Pa., has been elected city superintendent beginning July 1.

DR. HARVEY A. SMITH, assistant superintendent in charge of senior high schools in the District of Columbia, will resign July 1 to become superintendent of schools at Lancaster, Pa.

DR. ELMER SCOTT HOLBECK, director of junior high schools in Passaic, N. J., will become assistant superintendent of schools in September. Elevation of Doctor Holbeck to the assistant superintendency will place him in first position for the superintendency when ARTHUR D. ARNOLD, now serving his last term, retires.

W. F. LOGGINS, now superintendent of schools, Sumter, S. C., has been appointed assistant superintendent and director of secondary education in the schools of Greenville, S. C.

HARRY V. FOSTER has been named superintendent of schools at Montrose, Colo., succeeding JOHN B. MORGAN, resigned.

ERNEST E. OERTEL of Los Angeles recently was elected superintendent of the Hemet Valley school system, Hemet, Calif., to succeed PAUL G. WARD, who resigned after seventeen years in this position and fifty years as a school administrator in California.

WILLIAM MELVIN has been appointed superintendent of schools at St. Bernard, Ohio, near Cincinnati.

State Superintendents

T. H. ALFORD became commissioner of education for Arkansas on April 16, succeeding W. E. PHIPPS. Since 1933 Mr. Alford had been superintendent of schools at North Little Rock, Ark.

DR. ALONZO G. GRACE, professor at the University of Rochester, has been elected commissioner of education for Connecticut by the state board of education to succeed ERNEST W. BUTTERFIELD, who resigned. Doctor Grace is now directing a survey in the state of Washington.

Principals

GORDON N. MACKENZIE, who will receive a Ph.D. degree from Stanford University in June, has been made principal of the Wisconsin High School, Madison, succeeding H. H. RYAN.

RALPH W. HALLER and DR. JOHN V. WALSH, of the New York City schools, have entered the ranks of high school

principals. Mr. Haller, administrative assistant, goes to Andrew Jackson High School and Doctor Walsh of Morris High School will head Flushing High School.

DR. DANA Z. ECKERT has been appointed principal of Langley High School, Pittsburgh. Doctor Eckert has been head of the Frick Teachers' Training School.

DR. WYLIE G. PATE of Millville has been engaged as supervising principal of schools of Middletown Township, Red Bank, N. J., succeeding DR. PAUL H. AXTELL, who will become supervising principal of the schools at Caldwell, N. J.

G. M. SMITH will become principal of the high school at Waco, Tex., at the end of the school year, succeeding the late E. T. GENHEIMER.

RICHARD R. JENSON, for five years principal of Moravia High School, Moravia, N. Y., has been elected principal of Baldwinsville High School, Baldwinsville, N. Y.

HOWARD JEFFRIES has been elected principal of Lansford High School, Lansford, Pa., succeeding JOHN E. LAUER, who was named superintendent of the Lansford schools effective September 1 when DR. E. M. BALSBAUGH, present superintendent, will leave.

MARK SCULLY, science teacher at

Jackson High School, Jackson, Mo., was elected to the office of principal, succeeding RUSSELL O. HAWKINS, named superintendent.

JOSEPH N. MADDOCKS, principal of the Roosevelt Junior High School, Altoona, Pa., was elected principal of the senior high school at Altoona, Pa.

DR. LEON H. WESTFALL of South Glens Falls, N. Y., has been appointed principal of New Hartford High School, New Hartford, N. Y.

FRANCIS CURRAN, vice principal of the Putnam High School, Putnam, Conn., has been appointed principal of the school. The post was created when the office of supervising principal, held by CARL M. DIEFENBACH for seven years, was divided into two positions. CLINTON C. NICHOLS was appointed vice principal.

MORRIS MEISTER has been named principal of the new Science High School for Boys to be established in September in the DeWitt Clinton High School annex in New York.

In the Colleges

LOUIS LEON THURSTONE, professor of psychology at the University of Chicago since 1924, has been designated Charles F. Grey Distinguished Service Professor, succeeding CHARLES H. JUDD, retiring head of the department of edu-

cation, who has held the chair since 1929.

DR. EVERETT B. SACKETT, a member of the faculty of the graduate school of education at Harvard University, has been appointed associate registrar and associate professor of education at the University of New Hampshire.

DR. FRED ALEXANDER, since 1930 director of the extension department at Furman University, has accepted a position as extension teacher in the field of in-service training for teachers with the University of South Carolina.

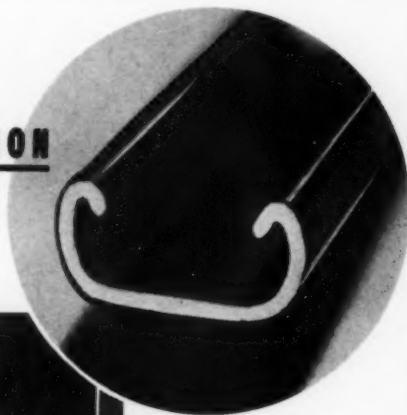
DR. CLARENCE R. DECKER, executive vice president of the University of Kansas City, Kansas City, Mo., has been named president of the university, succeeding DR. J. DUNCAN SPAETH, who will become president emeritus.

DR. FRED ENGELHARDT, president of the University of New Hampshire, will be a special lecturer in the school of education at the Northwestern University summer session.

J. R. OVERMILLER has resigned the presidency of York College, York, Neb., effective September 1.

H. A. SPINDT, principal of the Kern County Union High School in Bakersfield, Calif., has resigned to accept a position as manager of the bureau of placement and vocational guidance at the University of California, Berkeley.

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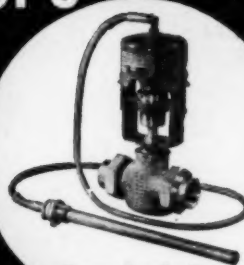
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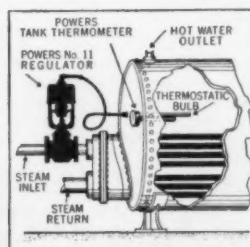
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JOHN D. McCLARY, who has been principal of the township high school, Princeton, Ill., for the last eleven years, has been appointed graduate assistant to DR. A. H. EDGERTON, director of vocational guidance at the University of Wisconsin.

DR. HOLLIS D. KEMPER, superintendent of schools at Meade, Kan., has accepted a position as acting dean of Sioux Falls College, Sioux Falls, S. D. He will also head the department of education at the college.

DR. SAMUEL M. BROWNELL, superintendent of schools at Grosse Pointe, Mich., has been appointed Sterling professor of school administration at Yale University.

DR. M. M. CHAMBERS, a member of the staff of the American Youth Commission of the American Council on Education, will offer two courses for graduate students in education at the Ohio State University from June 20 to July 27. These courses will deal with federal and state school administration and with the preparation of theses and other scientific reports.

Retirements and Resignations

JEROME BURTT has resigned as superintendent of schools, Fitchburg, Mass., to become principal of Williams Memorial Institute, New London, Conn.

MELDEN E. SMITH has resigned as superintendent of schools in Thompson, Conn.

W. H. S. ELLINGWOOD, superintendent of schools for the district comprising Livermore Falls, Wayne, Fayette and Mount Vernon, Me., will retire in June after forty-five years of teaching.

CARRIE E. MORGAN, assistant superintendent of schools, who has been associated with school administration at Appleton, Wis., for the last forty-four years, will retire on July 1.

RICHARD MANSFIELD, superintendent of buildings in the Peekskill Public School District, Peekskill, N. Y., will retire July 1 at the age of 70.

ORDWAY LEWIS has resigned as principal of the Edwin A. Jones Junior High School, Stoughton, Mass.

ARTHUR STETSON has resigned as superintendent of schools at Titusville, Pa., to become superintendent at West Chester, Pa.

HARVEY O. HUTCHINSON, superintendent of schools at Elmira, N. Y., for seventeen years, was recently dismissed by the board of education because of "irreconcilable differences of opinion." If he does not take a school position in some other city, Mr. Hutchinson will be eligible for a retirement pension. OSCAR F. KERLIN, director of grades, was named acting superintendent.

DR. DANIEL J. CRAY, after twenty years of service as superintendent of schools, Pittston, Pa., has announced he will not be a candidate for reappointment when his fifth four-year term expires at the end of this school year.

Deaths

FULLER L. AUSTIN, superintendent of schools, New Canaan, Conn., died unexpectedly at the age of 37 years. Mr. Austin had served as superintendent of schools in Walton, Gordon and Wahoo, Neb., until 1929 when he became deputy superintendent of public instruction, a post he held until 1934 when he was named superintendent of schools at Southbridge, Mass. He was appointed at New Canaan last June.

DR. ROBERT KENNEDY TOAZ, superintendent of schools at Huntington, N. Y., from 1906 to 1933, died at the age of 69.

CHARLES ZIMMERMAN, principal of Garfield High School, Terre Haute, Ind., died recently at the age of 54 years.

THE REV. BRO. FLORENTIUS, F.M.X., founder and principal of the Central Catholic High School for Boys, Lawrence, Mass., died recently.

DR. J. FREEMAN GUY, associate superintendent of Pittsburgh public schools, died recently at the age of 56.

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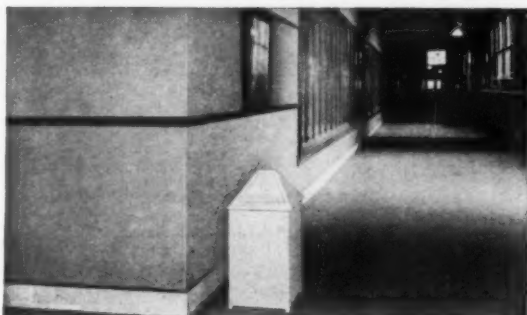


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THE BOOKSHELF

THE SIXTH YEARBOOK OF SCHOOL LAW, 1938. Edited by M. M. Chambers, With Edward C. Elliott. Washington, D. C.: American Council on Education, 1938. Pp. viii+150. \$1 (Paper Cover).

Should have a place in every administrative library; invaluable for superintendents and board members; a review of the year's significant decisions authoritatively edited.

THE CONSTITUTION AND WHAT IT MEANS TODAY. By Edward S. Corwin. Fifth Edition. Princeton, N. J.: Princeton University Press, 1937. Pp. xxiii + 193. \$2.

A well-known and balanced text brought up to date by inclusion of "New Deal" cases.

YOU HAVE SEEN THEIR FACES. By Erskine Caldwell and Margaret Bourke-White. Illustrated. New York: Modern Age Books, Inc., 1937. Pp. 54. \$0.75 (Paper Cover).

The southern sharecropper in pictures; the effect of the one crop system on a segment of the American people. For secondary and college libraries.

PSYCHOLOGY OF ELEMENTARY SCHOOL SUBJECTS (Revised Edition). By Homer B. Reed. Boston: Ginn and Company, 1938. Pp. xi + 582. \$2.40.

Brings a standard text up to the present through complete revision.

THE INSTRUCTIONAL PROGRAM: ITS ORGANIZATION AND ADMINISTRATION. By Frederick Arthur Ford. New York: Prentice-Hall, Inc., 1938. Pp. xvi + 458. \$2.75.

A discussion of the instructional program that places much more than customary emphasis upon the relation of the state to organization and administration.

HIS EXCELLENCY GEORGE CLINTON. CRITIC OF THE CONSTITUTION. By E. Wilder Spaulding. New York: The Macmillan Company, 1938. Pp. xiii + 325. \$3.50.

Worth-while biography of a much neglected yet important historical figure in the American struggle for independence. A foe of centralized government, he fought against the constitution and thus drew for himself a long period of neglect by the historians.

FRESH PAINT ON THE LITTLE RED SCHOOLHOUSE. Edited by Samuel Frankenger. Boston: The Stratford Company, 1938. Pp. 105. \$1.50.

Series of informal letters through which an old professor tries to suggest improvements for elementary teaching.

SEQUOYAH. By Grant Foreman. Norman: University of Oklahoma Press, 1938. Pp. 90. \$1.50.

Story of the able Cherokee who developed the Indian alphabet and made literacy possible to his people.

THE AMERICAN SCHOOL AND UNIVERSITY. TENTH ANNUAL EDITION, 1938. New York: American School Publishing Corporation, 1938. Pp. 658.

Improved mechanical presentation makes this handy reference work of greater value to the administrator.

MODERN PRACTICES IN THE ELEMENTARY SCHOOL. By John A. Hockett and E. W. Jacobsen. Boston: Ginn and Company, 1938. Pp. v + 346. \$2.60.

Simply and interestingly written text discussing modern elementary school educational practices.

PSYCHOLOGY OF ELEMENTARY SCHOOL SUBJECTS. By William Henry Gray. New York: Prentice-Hall, Inc., 1938. Pp. xii + 459. \$3.25.

Presents results of recent research in the psychology of elementary learning.

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SCHOOL SIZE AND SCHOOL EFFICIENCY. By Warren C. Seyfert. *Harvard Bulletins in Education*, No. 19. Cambridge, Mass.: Harvard University Press, 1937. Pp. xiv + 316. \$1.50 (Paper Cover).

Research in a limited area that indicates the superiority of the large over the small secondary school.

Just Off the Press

UTILIZING COMMUNITY RESOURCES FOR VOCATIONAL GUIDANCE AND TRAINING. By M. P. Moe and L. O. Brockmann. Helena, Mont.: The Authors, Box 217, 1937. Pp. 56. \$0.50 (Paper Cover).

MY WORKBOOK IN PHONICS; Parts One and Two. By Marjorie Hardy. Chicago: Wheeler Publishing Company, 1937. Pp. 48. \$0.20 each (Paper Cover).

BOOKS FOR HOME READING FOR HIGH SCHOOLS. Graded and Classified. Prepared for The National Council of Teachers of English by Its Committee on Recreational Reading, Stella S. Center and Max J. Herzberg. Chicago: The National Council of Teachers of English, 1937. Pp. 118. \$0.20 (Paper Cover).

THE DIARY OF A HOUSING MANAGER. By Abraham Goldfeld. Chicago: The National Association of Housing Officials, 1938. Pp. ix + 115. \$1.

MARY LYON THROUGH HER LETTERS. Edited by Marion Lansing. Boston: Bruce Humphries, Inc., 1937. Pp. xiii + 317. \$2.

ESSENTIALS OF BUSINESS MATHEMATICS. Principles and Practice. By R. Robert Rosenberg. Second Edition. New York: The Gregg Publishing Company, 1938. Pp. x + 326. \$1.20.

INFLUENCE OF GEOGRAPHY ON OUR ECONOMIC LIFE. By Douglas C. Ridgley and Sidney E. Ekblaw. New York: The Gregg Publishing Company, 1938. Pp. vi + 658. \$1.84.

TYPEWRITING FOR PERSONAL USE. Second Edition. By E. G. Blackstone and C. T. Yerian. Second Edition. New York: The Gregg Publishing Company, 1937. Pp. vi + 149. \$1.32.

COUNTRY LIFE STORIES. Some Rural Community Helpers. By Elizabeth Perry Cannon and Helen Adele Whiting. Illustrated by Vernon Winslow. New York: E. P. Dutton & Co., Inc., 1938. Pp. 95. \$0.65.

GO FORTH AND TEACH. An Oration Delivered Before the Authorities of the City of Boston, July 4, 1842, by Horace Mann. Also, Other Materials Relating to His Life. Centennial Edition. Published by the Committee on the Horace Mann Centennial. Washington, D. C.: National Education Association, 1937. Pp. viii + 148. \$0.50. Discounts on quantities.

MONKEY STORIES. By Carl Van Der Voort. Illustrated by H. H. Hyde. Boston: Bruce Humphries, Inc., 1938. Pp. 61. \$1.

THE BEGINNER'S PUPPET BOOK. By Alice M. Hoben. New York: Noble and Noble, Publishers, Inc., 1938. Pp. 150. \$2.

AH-MING. A BOY IN CHINA. By Grace Graham Keen. Illustrated. Harrisburg, Pa.: Stackpole Sons, 1938. Pp. 178. \$0.72.

EXPERIENCE UNITS IN BIOLOGY. By J. Frank Faust and George R. Biecher. Harrisburg, Pa.: Stackpole Sons, 1938. Pp. x + 404. \$1.20.

HOW TO STUDY HANDBOOK. By Robert W. Frederick. New York: D. Appleton-Century Company, Inc., 1938. Pp. xxviii + 442. \$1.24.

THE WILLIAM RAINEY HARPER MEMORIAL CONFERENCE. Held in Connection With the Centennial of Muskingum College, New Concord, Ohio, October 21-22, 1937. Edited by Robert N. Montgomery. Chicago: The University of Chicago Press, 1938. Pp. xi + 167. \$2.

PROGRESSIVE EDUCATION ADVANCES. Report on a Program to Educate American Youth for Present-Day Living. A Publication of the Progressive Education Association. New York: D. Appleton-Century Company, Inc., 1938. Pp. 70. \$0.25 (Paper Cover).

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The locker is an entirely new type of multiple unit wardrobe, it is stated by the manufacturer, Diebold Safe & Lock Co., Canton, Ohio. Each locker is controlled from the teacher's or supervisor's wardrobe, and there are no handles or locks on the individual "L" shaped compartments. Whenever one person is responsible for the garments of a group of people, the "Eldoorobe" is said to provide centralized control and protect the garments against pilfering and mysterious disappearance.

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The rest of this touching ditty deals with the violent reactions of the boarders to ham and eggs. And small blame to 'em. Imagine the riot that would ensue if the young customers of the school cafeteria were treated that way even once a day. Not that there is much danger; in fact, pupils are pretty well spoiled by the excellence of the food served in the average school cafeteria.

The business of feeding school children has grown from an experiment to an important phase of school life and the planning of the kitchen and cafeteria equipment has grown with it.

There is a new brochure entitled "When the School Lunch Bell Rings," published by Albert Pick Co., Inc., 2159 Pershing Road, Chicago, which goes into detail on the subject of cafeteria planning and the relationship between planning and economical operation.

Albert Pick will be glad to send copies of the booklet to those interested in cafeterias.

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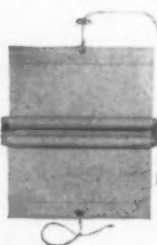


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case of electrical trouble. The machine is loaded through a side door on a conveying mechanism. An indicator states the number of bottles in the machine.

Inquiries directed to the Mills Novelty Company will bring information on the subject.

The Young Victor

"All in one and one in all" is the motto that we offer gratis to the Victor Animatograph Corporation, Davenport, Iowa, for its new model 33 Animatophone. Translated, the motto indicates that all the equipment that makes up a sound-on-film projector is packed into one small carrying case. As for the "one in all" angle, it is undoubtedly the ambition of Victor Animatograph to put one model 33 in every school.

The fair-haired boy of the Victor family is intended for use only in small rooms, i.e. classrooms. It is not designed for auditoriums. It is claimed to be a worthy descendant of a distinguished ancestry, embodying such features as brilliant flickerless projection, crystal-clear sound and the utmost simplicity and convenience in handling.

A standard feature of model 33 is a jack into which a microphone or turntable may be plugged for voice and

public address training, for making announcements and amplifying phonograph record reproduction.

Conserving the Crockery

For many years it was a tradition among the officers of British regiments to break their wine glasses after a toast to the queen. (For further details, see R. Kipling.) It was an expensive as well as a gallant gesture and greatly delighted the contractors who supplied glassware for the army. Today, however, it would be frowned upon by modern economy-minded school cafeteria managers. Their main idea is to preserve the crockery for as long as possible.

In accord with this policy are dishwashing machine manufacturers like the Colt Patent Fire Arms Manufacturing Co., Hartford, Conn., which earnestly points out that a good mechanical wishwasher is a lot more saving of dishes than a human one. It is also more thorough, for, after all, one could hardly expect a human being to wash dishes in the scalding water that really should be used to achieve perfect cleanliness.

Colt is announcing a new model, RG-16, equipped with an 8 gallon tank, direct action sprays above and below and a pump designed to throw 100

gallons of washing solution per minute directly on to the tableware. Colt is prepared to supply it complete with stand ready for connections.

Generalities

Ditto, Incorporated, Chicago, manufacturer of gelatin and direct process duplicators and supplies, announces the resignation of A. N. STEELE as general sales manager and the appointment of ARTHUR WESTPHAL to that position. Mr. Westphal recently resigned from Marshall Field & Company, where for the last five years he has been operating and personnel manager of both the wholesale and retail divisions, and general manager in charge of all real estate operations. In his new position, Mr. Westphal will govern the personnel and sales training of the Ditto selling organization and will direct the sale of Ditto products through the company's sales and service branches and dealers . . . ERNEST W. STINER, vice president and general manager, Deskor Chair Sales Corporation, Boston, died recently after an illness of less than two weeks. Because of his exhausted condition following a meeting of the A. A. S. A. in Atlantic City, he was unable to resist the recurrence of an illness that developed as a result of his World War service.

MAKING
\$13,455
DO THE WORK OF
\$200,000

Are you faced with that toughest of all school problems—more boys and girls but no more building money?

DESKOR CHAIR Units may solve it for you as they have for schools the country over.

In one city district additional facilities for nearly a thousand more pupils were vitally needed. DESKOR Convertible Desk-or-Chair Units were installed. Assembly halls do double duty as study stations providing the equivalent of eleven new study stations, at a saving in cost of about \$186,000 worth of new building.

Whether your *capacity vs. space* problem is large or small and whether it involves new or existing buildings, it will pay you to get the DESKOR story. Full information about DESKOR and our free planning service is yours for the asking. Write

 **DESKOR CHAIR** *Sales Corporation*
5 WATER STREET, BOSTON, MASS.



Refinish desks, tables . . . at a big saving with SKILSAW SANDER

New improved models produce a smooth even finish, without ripples or ridges . . . faster and cheaper! Easy to use—plugs into a light socket. The electrical method for refinishing desk tops, resurfacing blackboards, tables, stair treads. Ideal for manual training classes. Thousands in use.

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SKILSAW, INC.
Dept. C, 3320 Elston Ave., Chicago

• Full 32 sq. in. sanding area. Ball bearing construction. Also made with vacuum dust collector. When used with our bench stand, instantly converted into Bench or Spindle Sander for manual training work.

Save Sight with **DRAPER** Sight-Saving WINDOW SHADES

The Draper Style V Double Roller Shade allows the full benefit of valuable sight-saving light . . . Top Window light! Rolled up or down, it shuts out excessive glare . . . makes daylight possible through the entire window. Its operation is simple, quiet, hygienic.

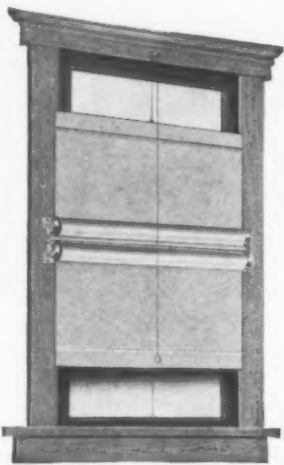
Its high-grade construction is sound economy. Repairs, upkeep and depreciation are minimized. It's completely and easily demountable from the Draper Pulley Bracket, and has special fixtures for attaching the V Light Shield to either wood or steel frame windows.

Write for catalog showing correct installation on all window types. Address Dept. N. S.

ARCHITECTS — Sample parts and catalog useful in planning will be sent, gladly.

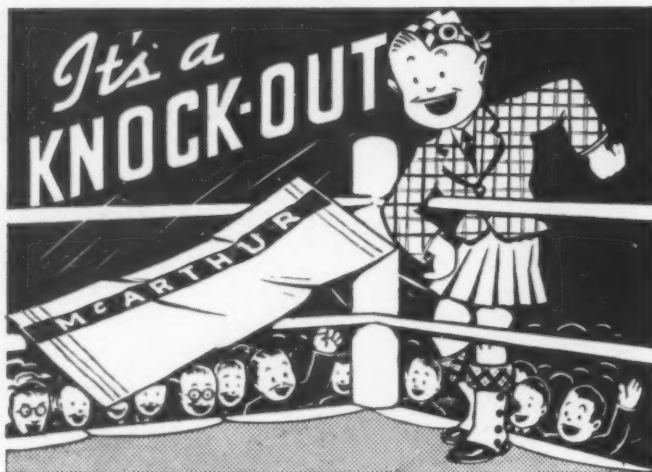
LUTHER O. DRAPER SHADE CO.
SPICELAND, IND.

Preferred by Leading United States Schools



Draper Style V Double Roller Shade

Special
Fixtures for
All Steel
Window
Shade
Installations



... THIS McARTHUR LINE OF FAMOUS
LONG-LIFE SCHOOL GYMNASIUM TOWELS!

Super-Gym

... a towel of heavy terry rib weave that gives an exhilarating rub-down.

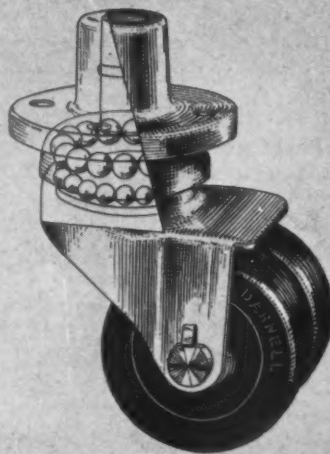
Super-Turk

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McArthur Super-Gym and Super Turk Towels are used by leading universities, colleges and high schools throughout the country! They are strongly woven towels that stand up, year after year, under continuously hard service and frequent laundering, affording the lowest cost per year for a high quality towel.

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Check in
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In CLEVELAND it's
The **HOLLENDEN**

In COLUMBUS it's
The **NEIL HOUSE**

In AKRON it's
The **MAYFLOWER**

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The **NEW SECOR**

In JAMESTOWN (New York) it's
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Unusually Comfortable, Modern Rooms;
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SCHOOL EXECUTIVES

have found that price alone is only half the story. What they get for that price is the other half. True thrift means getting one's full money's worth.

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Most of these substantial concerns have kept right on advertising their products to schools. Having built up a reputation for good merchandise, they could not afford to jeopardize the confidence of school executives in their integrity. Advertising has been their anchor to quality—it will continue to be their means of assuring honest values.

